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No. 3095

United States  
Circuit Court of Appeals

For the Ninth Circuit.

Transcript of Record.  
(IN FOUR VOLUMES.)

LOST HILLS MINING COMPANY, a Corpora-  
tion, and UNIVERSAL OIL COMPANY,  
a Corporation,

Appellants,

vs.

THE UNITED STATES OF AMERICA,  
Appellee.

VOLUME III.  
(Pages 801 to 1184, Inclusive.)

Upon Appeal from the United States District Court for the  
Southern District of California, Northern Division.

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(Testimony of Orlando C. Barton.)

The WITNESS.—(Continuing.) It was an incorporated company, and it was a Hanford company, but most of the locators of the Lost Hills were not in the company. The Square Deal Company had a contract from the locators of the Lost Hills to put down a well, and to build a house and develop the field—the claims of the Lost Hills Company. That was not in addition to the Barrett contract.

Q. Now, you may correct that by stating that really the further fact, that it was a company that was organized by Barrett to raise money to carry out his contract to the Lost Hills, if that is the fact.

A. I guess that is the fact. It is kind of mixed up in my memory about; I guess it was a contract between the Lost [553] Hills Company and Barrett originally.

Q. Then the contract between Barrett and the Square Deal Company?

A. That is the fact, I think.

Q. I call your attention to an affidavit made by you in this matter, namely, application for patent covering the land dated March 30, 1915, and I will allow you to read a copy of it, with your permission. Just read that. I want you to refresh your mind regarding some things, because you had your note-book at that time. (Hands paper to witness.) You have looked at that affidavit, have you? A. Yes, sir.

Q. You state in your affidavit that you knew that Ed Dudley was a driller, and that you went out to the Lost Hills with Martin and Dudley in their machine in July, 1909? A. Yes, sir.

(Testimony of Orlando C. Barton.)

Q. By going to the Lost Hills, you took them to the property involved in this matter?     A. Yes, sir.

The WITNESS.—(Continuing.) This is subsequent to the time I went down from Hanford with Butts and Martin. It is true that I went with them from Visalia to the Lost Hills at least three times during the summer of 1909.

Q. When you went out with Martin and Dudley on to this property in the summer of 1909, where did you eat your meals on the property?

A. I don't remember the meals. We ate the meals—were in an automobile, and I think we ate in the tents. I don't remember having any grub along with us.

The WITNESS.—(Continuing.) I think we ate in the cabin [554] built by Barrett once. I cannot state it for sure, but to the best of my knowledge we did eat once in the cabin. I know that Martin and Dudley used and occupied the cabins and buildings that Barrett built when Martin and Dudley got busy developing this property. I saw them occupying those cabins with their men.

Q. Where were the buildings located, first?

A. I said cabin. Let me make an explanation.

Q. Certainly.

A. When Barrett threw up the job, why he hauled one or two of those cabins away and tore two others down, somewhat, but the one that I lived in was standing there whole. Barrett quit the job, you understand, and Martin and Dudley used the one I was living in, and what was left of the others, and also the

(Testimony of Orlando C. Barton.)

timber and lumber that Barrett had brought on the ground.

Q. Did they continue to use that material from the time they took hold of the job?

A. Yes, sir, they commenced to use the material the day after they arrived there. It was Christmas, 1909, that they arrived.

Q. Had you seen Martin and Dudley out on that property prior to that time?

A. Yes, sir, I saw J. D. Martin with his head carpenter and another man or two on Section 30.

The WITNESS.—(Continuing.) It was some time in the fall, and it was after Martin and Dudley had made up their minds to take hold of the proposition, that Martin took men over there. I think the 2d of September, I am not sure. It was in the fall. I think it was prior to October, but I don't recall the date when I saw them. I know the men that I was with, Clarence Smith of the Bank of Visalia, and Adolph Levis was with me, and we passed near enough to them that we hollered at them.

At that time I was taking Clarence Smith [555] over to see a quarter section of land that belonged to the Visalia Bank over in 25-18. I was piloting them. I cannot find out from my memorandum what the day was when I saw them there working. I don't think that my item here would cover that trip. Maybe it does, if it is important, I will look it up.

Q. Yes, it is important. I call your attention to an affidavit made by you before E. C. Farnsworth.

A. Well, do you want me to look and see if I can find that?

(Testimony of Orlando C. Barton.)

Q. Yes, I wish you would. I will ask you this question. Did you see Martin and Dudley on Section 30, or either of them, with their carpenters and builders during the fall of 1909? A. Yes, sir.

Q. Do you know about what time that was?

A. I was there so many times that it is out of my head as to who I was with that day. I remember I was with a good many men and parties going through there.

The WITNESS.—(Continuing.) It was before winter, I know that, and it was before I went down there to stay permanently. I saw Martin at this particular time that I have in mind, and there was a man named Warren Bruce with him who was a head carpenter, and I knew who it was.

Q. Did you see what they were doing?

A. They had some tools in their hands, I think a pick, likely.

The WITNESS.—(Continuing.) This was on Section 30, right at the north line, on the northwest quarter.

The terms of the first contract of Martin and Dudley with the Lost Hills Company had been agreed to between the company and Martin and Dudley verbally before it was really signed up in writing. [556]

Q. How do you know that the terms under which the Martin and Dudley were to drill up this territory, were agreed to, prior to the date of the formal contract?

A. Martin and Dudley had their office here in this block, and I was well acquainted with them, and I

(Testimony of Orlando C. Barton.)

talked to them nearly every day, and I did the principal part of the talking with them myself, upon this contract, and we were talking up the contract here a long time. That is how I knew it. I knew what Martin and Dudley wanted.

Q. Did you know if Martin and Dudley or either of them did anything in reference to the procuring of material or tools during the summer or the fall of 1909? And prior to the signing of this contract, which had reference to these lands?

A. Yes, sir, I remember this, as soon as Dudley made up his mind to go down there to the Lost Hills, he went to Los Angeles and ordered tools made. He had tools of his own, not the standard rig tools, he went down and had them to begin work on his tools.

The WITNESS.—(Continuing.) It was in the fall of the year, and I don't think my notes cover the time he was there. It was prior to the signing of the contract, I have forgotten when that was. It was prior to October 27, 1909. I don't know how long prior it was.

Martin and Dudley used the building that I have referred to, that was left by Barrett, as their headquarters out there to develop all the other surrounding pieces of land. That building was used for a cook-house. The men all ate there and camped around it in tents, and camped out while they were building more houses. That was on Section 18, township 26, range 21. They used that locality and that building as their headquarters about three weeks. Then their carpenters and their men moved over to a



(Testimony of Orlando C. Barton.)

house that was partly finished on the NW. $\frac{1}{4}$  of Section 30, but some of the men stayed over on Section 18. Warren Bruce, their carpenter, had started to construct that house on the NW. $\frac{1}{4}$  of Section 30 originally. He finished the house on the NW. $\frac{1}{4}$  of Section 30. He commenced to build it on the 26th of December, 1909.

Q. How do you fix that in your mind?

A. Well, it was Christmas they arrived, and the next day they had some of the lumber, and they went over and followed [557] Barrett's road on Section 24, and came back on Section 30, and we went along with the lumber to fix a place for the house.

Q. When was it that Martin and Dudley moved everything off of Section 18 on to Section 30?

A. They did not move everything off of it at all, they drilled a well there afterwards.

The WITNESS.—(Continuing.) They still kept the cabin on Section 18. The men boarded there that drilled the well on Section 18. When they were drilling the well on Section 30 the men boarded in that house that Warren Bruce built, and Bruce kept on building other houses; the other houses were tents with lumber floor.

Q. Did you come in contact with the other various stockholders of the Lost Hills Company, who were locators of these lands, during the spring and summer of 1909, very often? I will call some of them by name for you. The locators of the SE. $\frac{1}{4}$  of Section 30, on the claim known as Signal Claim were Adolph Levis, William Lindemann, R. C. Hardin,

(Testimony of Orlando C. Barton.)

F. W. Hall, F. T. Butts, W. B. Wallace, Seth Smith and C. A. Butts.

A. Yes, sir.

The WITNESS.—(Continuing.) I was well acquainted with all of them, and met them frequently, except that man Hall, I was introduced to him, but I didn't see him very often. Those gentlemen and Mrs. F. T. Butts became stockholders in the Lost Hills Mining Company. I saw them frequently in connection with the business of the Lost Hills Mining Company during the spring and summer of 1909.

Q. I will ask you the same question with reference to the NW.1 $\frac{1}{4}$  of Section 30. That location was known as the Lost Hills Location. And it was made and signed by O. D. Barton, that is [558] yourself, J. N. Hoyt, H. L. Light, W. B. Wallace, W. F. Hall, J. H. Butts, F. R. Height.

A. I was well acquainted with all of them. I saw all of them frequently.

Q. Did you see any of them out on the property during the spring and summer and fall of 1909, do you remember any of them?

A. Well, Butts, I went down there frequently with Butts.

The WITNESS.—(Continuing.) I did not go out there with Mr. Light in the fall of 1909, but he was a stockholder in the Lost Hills; I saw him frequently at Hanford. I recall J. N. Hoyt as a locator on the property, besides the Butts. These locators were active in endeavoring to arrange for the development, and in endeavoring to develop these

(Testimony of Orlando C. Barton.)

properties during this time.

Q. How did they show their activity?

A. Well, the headquarters of the company was at Hanford, and I was there frequently to see the members of the company, to try and get the Lost Hills developed. Didn't any of them go down there and go to work with a pick and shovel, but they were doing all they could to raise the money and get it developed.

The WITNESS.—(Continuing.) They expected me to get the drillers as I was an oil man, and in the field all the time, and knew oil men. They left it up to me more than anybody to hunt up somebody that could put a well down there.

At that time, in 1909, this land was about 26 miles from a railroad, according to the way they run in an automobile; it is about 26 miles according to the roadometer. There is no timber on this land. There was no water on the land at the time we were out there when Barrett and Butts were busy. The water had to be brought from the Buena Vista slough down there, the place I pointed out to you where the bridge is, until that went dry. We drank that water until we all got sick; then we went clear across the slough to what is called the [559] Charley Brown place, and hauled water from there awhile. Then we hauled water from a well that is about 7 miles east of the Charley Brown place; that was late in the fall. The slough went entirely dry, and we hauled water part of the time 12 miles.

Q. Will you please state in what manner you got



(Testimony of Orlando C. Barton.)

water in there, or in what manner Butts and Barrett got water in there in December, 1908, and from thence on.

A. Well, Barrett took a water tank from Hanford with him. The tank held about 12 barrels, it was a short tank, and they filled it up when they got off south of Angiola, in this county, and that was the water they used for drinking and cooking. Well, when I went down there, why that was the next year, we Martin & Dudley's tank, and the men that had preceded us there two or three days had also brought that tank of water from some of these artesian wells down in the corner of this county. They had hauled that across there, and we were using that. And after we used that up we went down and got water out of the slough. The slough is right next to that township. Later in the season we went 12 miles after water, and the water for the engine and for the horses had to be hauled the same distance.

Q. You have testified that Butts and Barrett had something like 20 horses on that property in the middle of the winter of 1908?     A. Yes, sir.

The WITNESS.—(Continuing.) When they were working there they kept their horses on Section 18. They made some mangers there, and the mangers are there yet, or were there, when I went up the next year. They were out doors. Martin and Dudley used those mangers for their horses too—they used one of them.

Q. Where did Butts and Barrett get the water for those horses when they were there? [560]

(Testimony of Orlando C. Barton.)

A. Well, excepting at the first, all I can tell you for sure is, the slough was the nearest water.

The WITNESS.—(Continuing.) That slough was about five miles east of Section 30 and Section 32. Water had to be transported more than five miles. There was an angle in the road there that made it over five miles. I want to make a little explanation now. I am telling you what Butts and Barrett did. I was in correspondence with Butts all the time, and that is how I found out all he was doing. I was not there in December, 1908.

Cross-examination.

(By Mr. MURPHY.)

Q. Referring to the contract with Mr. Barrett which was executed December 19th, 1908, do you recall that land or what location this contract covered?

A. I know the section, and did know the exact subdivisions that were divided up, but it is rather out of my head. He was to have about half of the claims, I think, not quite.

The WITNESS.—(Continuing.) There were three claims on 30, four on Section 32, four on Section 20, four on Section 28, and four on Section 18. I don't remember exactly how they were to be subdivided when he brought in the wells, but his first well I think he was to get a little more than half of that claim.

Mr. REDDING.—We will introduce the original of that contract in due course.

Mr. MURPHY.—Q. The land which Barrett expected to operate covered some 23 claims?

(Testimony of Orlando C. Barton.)

A. Yes, sir.

Q. Located by the locators, who afterwards conveyed it to the Lost Hills Company? [561]

A. Yes, sir.

Mr. MURPHY.—I wanted to know if Barrett's operations were to cover the 23 claims of yours, and the claim which was located by the Devil's Den people.

The WITNESS.—Well, Barrett was to do the assessment work for the Devil's Den on that claim. That was a separate agreement, it has nothing to do with the Lost Hills Company. And he did the work on that claim; that is Butts did the work under the instructions of Barrett and the Square Deal Company.

(Continuing.) That was part of the work that Barrett did out there in the Lost Hills during the winter of 1908-9.

Q. The lands, however, which Barrett did work on, were not all of the claims which had been located by the various parties connected with the Lost Hills location?

A. You must excuse me for being a little forgetful; I had it in my head that his contract covered all those locations, but Section 8 appears to have been left out. It is just forgetfulness on my part.

The WITNESS.—(Continuing.) The locators in the Lost Hills group also had locations covering Section 8. They did not have any locations on Section 34.

I was not on the property in December, 1908. The

(Testimony of Orlando C. Barton.)

first I went out after Barrett arrived on the ground was sometime in the winter. I am not sure, I think it was in January. I went there and back, that is all, in the same day.

Q. What if any improvements did you find on any of the 23 claims which have been referred to, at the time of your visit there, after Barrett started his operations?

A. Well, I will begin at Section 18. There was one whole cabin there, and part of the others, and the mangers. A [562] large number of big timbers and lumber there that was all got together on 18, and there had been a great many pits sunk and roads graded over the other claims.

The WITNESS.—(Continuing.) That work applied to all 23 of the claims, work that Barrett did out there.

Q. Were there any houses or improvements established on Section 30 or Section 32 by Barrett?

A. There was no house on Section 30 or Section 32.

The WITNESS.—(Continuing.) Barrett did not erect any derricks or drilling rigs on either section 30 or 32. Barrett operated there until his contract became void.

Q. I mean how long did he stay out there and keep his men at work?

A. Well, he kept men there until his contract ran out.

Q. How many?

A. Well, his crew dwindled down, and I was there,

(Testimony of Orlando C. Barton.)

I remember being there once when there was one man there.

Q. How long did he keep the 27 men?

A. Oh, the bulk of them came out in January; it was a very bad winter, and hard to get grub in there.

Q. How long did they stay, those 27 men?

A. Well, they must have come out in January, that is all I can tell you.

Q. Were any improvements or any buildings erected on any of these lands by Barrett, after January, 1909?

A. Barrett gradually quit and went broke and got out of there, and what he did after the first day of January, why, I don't know. I was not right there all the time. If you mean by improvements, roads and digging pits in the gypsum and fixing places for derricks, he made that kind of improvements, but he did [563] not erect any houses except on Section 18. That was his headquarters.

The WITNESS.—(Continuing.) The only improvements on any of this land at the time Barrett arrived were, that I had been down there and put tall stakes at the corners of all the claims, and marked the claims with mounds or stakes, laid them off so they could be found easily. I made several trips down there for that purpose. I was looking after the claims. I had been interested in these lands long prior to the time Barrett started out there. I had located there before.

Q. Is it true that a house had been built by a man named Bell, who was formerly an associate of yours



(Testimony of Orlando C. Barton.)

in connection with some of these locations on Section 18?

A. Yes, Bell had built a house on Section 18.

Q. What were the conditions of those improvements at the time Barrett took charge?

A. Well, the two-story house was blown over, and the stuff had been burned up and most all hauled off by the sheep men, they had camped there and burned up the lumber. The house was totally gone.

The WITNESS.—(Continuing.) Bell left timbers for a derrick when he first went there; he had part of an outfit. I think there were some of them there when Barrett arrived. I don't know whether Barrett did anything with those timbers or not.

Q. Now, how many wagons did Barrett have?

A. If you will let me look in here I think I can find it. (Refers to memorandum book.)

Q. Certainly, I want you to any time you feel so disposed.

A. Let us see, that was November, 1908?

Q. December, 1908.

Mr. PERKINS.—I think he testified he saw the outfit [564] when it started over there in November, 1908.

A. No, it was the next year I saw them start out, but there were two wagons and a water tank, anyway.

(Mr. Murphy resuming.)

The WITNESS.—(Continuing.) I don't know how many trips they made hauling lumber out. I don't know how much lumber they hauled.

Q. Did they haul anything out there except lum-

(Testimony of Orlando C. Barton.)

ber and a tank, and of course some supplies?

A. I am not sure that they hauled the lumber from Hanford, I did not see them start that time. I think they got the lumber at Wasco. But I am not sure of that. It was new lumber.

Q. How large were the houses?

A. The one that I lived in I think was 12x16. One story, one room. The floor was dressed matched lumber. I built a porch on it after I went there. That was in November, 1909. That is when I went to stay.

Q. How long was the barn?

A. Oh, it was a small house; it was intended to hold hay, and the manger was outside. It was to store hay and grain.

The WITNESS.—(Continuing.) There was another house erected at that time, that I told you was partly torn down, about the size of the one I lived in. That was used for a bunk-house. It was about the same as the one I lived in, 12x16. That would make the three buildings in all. There was other lumber hauled out. There was scantlings and some timbers, about 6000 feet, I think, intended for use in putting up derricks.

Q. Was there enough lumber there for a complete derrick?

A. Well, there are all kinds of derricks, there was enough lumber there for a complete standard derrick, but for a smaller derrick there would be more. We did not use derricks [565] in our drilling operations.

(Testimony of Orlando C. Barton.)

Q. What was the purpose of that lumber?

A. Well, I suppose that Barrett intended to bring in a standard rig.

The WITNESS.—(Continuing.) He never brought in a standard rig. Martin and Dudley used that additional lumber. It was hauled there to Section 18 by Barrett, and left at those houses. Nothing was done with it. Just left laying on the ground. Martin and Dudley commenced moving it on the 25th of December, 1909. That was part of the lumber which they moved over to Section 30. That is all the lumber that I know of that Barrett hauled out at that time.

Q. The buildings and the 6,000 feet of lumber?

A. All the lumber that he brought was there on 18.

The WITNESS.—(Continuing.) That was placed on Section 18, and never moved by Barrett off of Section 18. The idea of erecting these buildings on Section 18 was that the Lost Hills Company favored putting the first well down on Section 18, and he proposed to drill there first. He was going to drill that first, then move to another claim and drill that, that was the idea of getting things together on Section 18. He never arrived at the drilling stage. He is like thousands of other oil men, he got broke before he got to it.

The work done by Barrett and his men including Butts, after erecting these buildings was development work; some of it was to mark the claim. They plowed around all the claims and marked them so it could be found. It is a desolate country, and hard



(Testimony of Orlando C. Barton.)

to find section corners there. They marked all the claims and fixed the roads so that they were passable. Of course I don't mean that they made good roads, so they could get across them. [566] They fixed grades, they filled places, they fixed places to drill, and also dug holes in gypsum. The four miles of road shown by the assessment affidavit for the location requested, was the same four miles of road which were built in connection with the development of all the claims. It depends upon what you call a road. Barrett fixed them so we could get over them; they were not county roads. There had been a road along the township line prior to Barrett's operations. There had been bridges across the slough. They were common lumber with pine stringers, and piles about every 12 feet. There was piles, then stringers, also, on that a floor. There were no side rails, they were just cheap bridges, but good ones. They were county bridges. Not all of them were washed out. There were two or three of them washed out in 1906 when the flood came. The Kern Lake Reservoir broke and turned loose a township of water down there all at once.

What Barrett did in connection with this slough was to go to those bridges that were washed out and make a levee by the side of them. Wherever a bridge washed out it makes a ditch under there, and a bad one, and he took what was left of the bridges and fixed the levee and bridges across the mud, in by the side of the levee so he could get his teams across there. He did not re-establish bridges, just made

(Testimony of Orlando C. Barton.)

culverts across the ditch, so it would be possible to drive a team across. He fixed it temporarily so he could get across, and he fixed the levee more or less the whole way along there. I can't tell you how long he was engaged in that work. I can tell you very nearly, very close the number of pits Barrett dug on each of these claims at that time,—47. Two on the NW.  $\frac{1}{4}$  of Section 30; two on the SW.  $\frac{1}{4}$  of Section 30; two on the SE.  $\frac{1}{4}$  of Section 30. Two on each claim. Generally speaking those pits were dug to expose the gypsum. But I was there, and I [567] helped dig some of those pits in places where they could be utilized to drill, particularly that one on the northwest of Section 30. The pit on Section 30, which would accommodate a drilling rig was 8x10, and about six feet deep. That was just before I arrived; I wasn't there when that pit was dug.

They dug other pits that would accommodate drilling outfits. There was one on the SE.  $\frac{1}{4}$  of Section 32, that was in the right place for drilling. It was something like ten feet square, and it was dug very deep, as deep as a man could through out the gypsum. Other pits were dug on Section 28 and Section 8. Those two on Section 30 and 32, to accommodate a drilling rig, are all that I remember on the lands involved in this matter. The rest of them were in the nature of gypsum development work.

Q. You say they did, however, dig some pits, intended to accommodate drilling rigs on Sections 20 and 28?

A. Well, there was one on Section 20 that was in

(Testimony of Orlando C. Barton.)

the right place for a drilling rig, but I was not there. I didn't locate that place, myself, I was out there afterwards.

The WITNESS.—(Continuing.) That first work was done in 1908; the latter part of December, 1908. I don't think they dug any pits in 1909. They did that in 1908.

Q. Would it be correct in stating then, that after January, 1909, there was very little work done by Barrett in the nature of development work on the lands in question?

A. Well, there was but very little work done by him.

The WITNESS.—(Continuing.) After January, 1909, Barrett was doing all he could to raise money to drill the wells there. Trying to raise some money with which to go ahead to finish the work.

I don't think he was out on the property himself very much [568] of the time. I know of his going to San Jose to try and raise money up there. He did not succeed in raising any money. I am not sure whether Butts made any attempt to raise any money to assist Barrett in this matter. I think Butts had some money in the Square Deal that was lost in that operation.

Q. Did you furnish any money to Barrett or to Butts?

A. No, I didn't furnish any money to Barrett.

Q. How much money did Barrett spend in this work he did?

(Testimony of Orlando C. Barton.)

A. Well, what I know about it, I think he spent a little over \$4,000.00.

Q. The assessment affidavit of the 23 claims for the year 1908 shows that approximately \$100.00 was expended on the claims. Practically all this work was done during December, 1908, and some of it in January, 1909. Was any more money expended by Barrett after January, 1909, except in keeping a man or two on the ground?

A. Well, that is all that I know. I saw the men on the ground there. They stayed until it got hot and run out of water, and they couldn't stay there any longer.

The WITNESS.—(Continuing.) That was in the summer. You can't stay in that country in the summertime unless you have a large supply of water. That was prior to the time the contract expired. It was when the weather was getting hot, probably about the middle of June. Excuse me. Well, it was when the weather was getting hot.

There was not more development work done on the land in question during 1909, after Mr. Barrett's contract expired, until Martin and Dudley took hold.

Q. That was in the latter part of December, 1909? [569]

A. Yes—no, I am wrong with all of it. I was thinking of something else. In the fall of 1909 the Lost Hills Company sent J. N. Hoyt with 3 wagons and men and horses, and they worked on all the claims.

The WITNESS.—(Continuing.) That was in

(Testimony of Orlando C. Barton.)

the nature of assessment work. They worked on all of the claims on Section 32, and Section 30, and Section 18 and Section 28. That was in the fall of 1909, in November. The men were there when I came there. I think I arrived there the 29th of November, on the ground, when I arrived there. They had only been there a few days prior to that. I think there were seven men there. They stayed until the latter part of December.

Q. What work did they do?

A. Well, Hoyt continued the work on the road, to improve them, and make them passable. And he also started some grades across the big gulches there, and I worked on the grades, and he also scraped some dirt off of the beds of gypsum with scrapers and they laid there in large areas in places.

The WITNESS.—(Continuing.) He did not build any additional buildings. He did not erect a derrick at that time. That was the first development work that was done on these lands in 1909 after Barrett's contract expired. At that time the company had already entered into these contracts with Martin and Dudley; we kept this work going until Martin and Dudley arrived.

Q. And Martin and Dudley in those contracts, they agreed to do the development work, did they not, in those contracts?

A. Well, I have forgotten who paid for that work, but I think the Lost Hills Company paid for that work.

Q. That is what I was trying to get you to explain,



(Testimony of Orlando C. Barton.)

why it was that the Lost Hills Company sent Hoyt down there to do this [570] assessment work, instead of allowing Martin and Dudley to go ahead with it, as provided for in their contract.

A. Well, the Lost Hills sent Hoyt down there, and me, to hold the claim, make good until Martin and Dudley could arrive. You must remember that part of this land was jumped, and we had great trouble to keep them from taking it all away from us.

The WITNESS.—(Continuing.) The work that Hoyt did in November and December, 1909, applies to all the claims in which the Lost Hills Company was interested at that time. It was not confined to the five claims involved in this proceeding.

After Barrett's contract expired in June, 1909, the Lost Hills Mining Company did not employ anybody continuously to stay on the property and keep watch over it. They employed people to look after it. A man can't stay there in the summer-time alone, unless he has got a team to bring water to him. That is the reason we didn't do no operating there in the summer. You can't begin operations there in the summer-time without providing a supply of water.

Q. How often did you go out there during the summer of 1909?

A. I cannot tell you, probably 6 times, or 7.

The WITNESS.—(Continuing.) And come back the same day.

Q. Was there any work going on on any of the land in question during the summer of 1909?

(Testimony of Orlando C. Barton.)

A. Do you want to take up the question of homesteaders and jumpers?

Q. No, I mean in behalf of the Lost Hills Company or the locators of these locations.

A. No, there was no work in the summer-time. No, there was no water there, nor nothing. [571]

The WITNESS.—(Continuing.) On November 29, 1909, I went out to the Lost Hills and established my residence there, first on Section 18. I lived there until the middle of February, 1910. Then I floated around one place and another, part of the time over at Discovery Wells. That is on Section 30, and I camped out on Section 32 and built a house down there, and was more or less busy over all the plains. I built the house on the SW.  $\frac{1}{4}$  of Section 30.

Q. That is not involved in this proceeding?

A. It is not involved, well.

The WITNESS.—(Continuing.) On Christmas, or December 25, 1909, Martin and Dudley's outfit arrived at my house on Section 18. Warren Bruce was the foreman of the party, and he and Byron Collins and Jim Brune were all that were there the first day. Martin or Dudley was not with them that day. These men were carpenters and teamsters. There was one team arrived that day; two other teams came inside of four days.

They brought with them almost the complete old Lakeshore rig, except the boiler, that drilled the discovery well, and lumber and tools. They did not bring all the tools, though, they brought some of the tools. They did not have so much lumber, probably

(Testimony of Orlando C. Barton.)

700 or 800 feet of lumber.

Q. What do you mean by "lumber" or the "Lakeshore" rig or "on the Lakeshore rig"?

A. Well, the lumber for the well that was afterwards drilled on the NW.  $\frac{1}{4}$  of Section 30, township 26, range 21.

Q. And known as the Lakeshore well?

A. Yes, sir.

Q. By reason of the fact it was done by the Lakeshore Company? A. Yes, sir. [572]

The WITNESS.—(Continuing.) That would make seven men and three teams that arrived at my place on Section 18. They did not do any work on Section 18 at that time. They did not re-establish any house on Section 18 at that time; I did that myself.

Q. You say at the time you moved out on Section 18 in November, 1909, Barrett had partly hauled away some of the buildings, two of the buildings of which he had erected?

A. Yes, sir. But he was compelled to replace them. There was a row in the company.

The WITNESS.—(Continuing.) He hauled away part of two buildings late in the season, I think in May, 1909. I went out and found he had hauled away some of the buildings, and I believe it was in May. At the time I went out there to live I enlarged the building I was living in.

These men who composed Dudley's party didn't do anything in the way of improvements after they arrived at Section 18. Well, the first thing they did,



(Testimony of Orlando C. Barton.)

we went around across Section 24—took a load around that way; then the teams went out, they were short of water and the teams went out the other way. And the next time they came back they come up from the south, and there was a part of that timber and supplies was there at my house for two or three weeks. The teams just hauled one load then went out. That was the load they brought when they first arrived; they went out the other way, south, off on this road that is marked here (indicating on map). And afterwards they came in by the south.

Q. (By Mr. REDDING.) That is on the road that Barrett built? A. Yes, sir.

(Mr. Murphy resuming.)

The WITNESS.—(Continuing.) When they came in there they didn't [573] use the road that Barrett built. They got lost, they didn't know where they were, none of them had ever been there before. And the next morning they went over to the NW.  $\frac{1}{4}$  of Section 30 with a load of lumber. The first thing they did, the carpenter set one or two of the men to leveling off the ground to set the derrick on, and he went to fixing a place to build a house. They used the pit which had formerly been dug by Barrett. They sunk it deeper, and fixed a way to get down to it.

They first put up a small building about 12x14, on the NW.  $\frac{1}{4}$  of Section 30, and after that was done the carpenter, sometimes with one or two assistants, kept right on building all the time—continuously. He finally put up a big kitchen and dining-room and

(Testimony of Orlando C. Barton.)

bunk-house, and then there was half a dozen tents with lumber floors. The lumber come up about 4 feet, that is, they were houses with a canvas roof. There was one main building, then these tents. They put them up as fast as they could.

They kept that work up for a year. Work was going on until I sold out; that was the headquarters of the company then. They started to erect a rig on the NW.  $\frac{1}{4}$  of the section on the 26th of December. They put it up as fast as they could. The water was very bad but they began drilling on the 19th of February, 1910. That was the first drilling that had been done on any of the land in question.

Q. Had anything been done on any of the other locations involved in this proceeding, in Section 30 and Section 32?      A. Yes, sir.

The WITNESS.—(Continuing.) J. N. Hoyt had repaired the road and fixed a grade across the gulch south of the lake there, and he was scraping the dirt off of the beds of gypsum there in places where the dirt could be scraped off with a scraper, so that [574] it would be clean.

Q. You are referring to assessment work that Hoyt did in November and December, 1909?

A. I thought that was what you were referring to.

Q. No, I mean by Dudley's party?

A. I am not sure about it. I saw Martin on the grounds quite a while previous to that with this man Wallace Bruce there, and another man or two, and they were at work doing something, I don't know what.

(Testimony of Orlando C. Barton.)

The WITNESS.—(Continuing.) It was along in November or October, somewhere. I saw Martin and a man named Bruce, with his carpenter that I spoke of. That was on the NW.  $\frac{1}{4}$  of Section 30. I saw them near enough to speak to them.

Q. Did you talk to them?

A. I did nothing, only holler at them as I went along.

The WITNESS.—(Continuing.) I don't know what they were doing there; I don't know how long they stayed there at that time.

Q. Did they have a team or automobile with them?

A. They were all afoot there, and I didn't see what they had, but Martin told me afterwards that they were the men that were going to put up the rig.

The WITNESS.—(Continuing). They were at the site of the Lake Shore well which was afterwards drilled.

Q. All the instruments they had was a pick?

A. Well, I remember a pick.

Q. Were they doing anything except just looking at the ground?

A. I didn't look at them long enough to see what they were doing. They were there on the ground and Martin was talking to them.

The WITNESS.—(Continuing.) I can't remember whether that [575] was before or after Martin and Dudley had signed the contract to do the drilling; I think it was before they signed the contract that they were there. I am not sure of that. It was after they agreed to do the work there. It

(Testimony of Orlando C. Barton.)

would be incorrect to say that there was no work done on any of the locations involved in this proceeding by Dudley and Martin up to the time in February, 1910, when Dudley's men spudded in a well on the NW.  $\frac{1}{4}$  of Section 30. They commenced work on the 26th of December, 1909, and as their operations extended all over the field, why, they begun right away to make preparations to drill in other places.

I don't think Dudley and Martin did much work on the SE.  $\frac{1}{4}$  of Section 30 up to February 20th, 1910.

Q. Did they do anything?

A. I can't remember everything at one time, but I remember Ed Dudley and I went down there. We walked out there and picked out a place to drill that gusher well, the well that was afterwards a gusher, and I remember saying there at that old pit, and we decided that was a good place to drill a well. But no work was done there at that time. You understand that the SE.  $\frac{1}{4}$  of Section 32 was fenced in and there were some homesteaders on it, and I was having trouble with them, and I was very busy there myself at work.

Q. On the SE.  $\frac{1}{4}$  of Section 30?

A. No, sir, on the SE.  $\frac{1}{4}$  of Section 32.

Q. What did you do on the SE.  $\frac{1}{4}$  of Section 30?

A. On the SE.  $\frac{1}{4}$  of Section 32 I told the old man to go off and not put up fences; and while he was digging post holes I was digging gypsum and levelling off the ground and getting ready to drill the well.

The WITNESS.—(Continuing.) I was repre-

(Testimony of Orlando C. Barton.)

senting the Lost [576] Hills Company. It was my business to take care of all the claims and as that claim was one of them, I gave it a good deal of attention. I was not prepared to do any drilling. And Martin and Dudley did not do any drilling on the SE.  $\frac{1}{4}$  of Section 30 prior to the putting in of the well in the NW.  $\frac{1}{4}$  of Section 30. They did not do any drilling on any of the locations on Section 32 prior to the time the well was spudded in on the NW.  $\frac{1}{4}$  of Section 30.

I can't tell you whether they hauled in any lumber for derricks for any of these other locations up to February 20, 1910. It was not long after that until they had lumber and other rigs on the road, you know. And whether any of it was—and I think there was not any of it arrived at that time, but they were getting lumber in there as fast as they could, all the time, for the improvement of all the claims. They were looking after all of the Lost Hills claims. That included the five claims involved in this proceeding—the claims on Sections 28 and 18. We were run off of Section 20 by an agriculturalist.

We tried to look after the claims on Section 8 but didn't have any success. Wherever we could not find any gypsum, any good merchantable gypsum, we quit. The agriculturist had the advantage of us, and we quit. It was the only standing we had in court was with a discovery of gypsum, and where we couldn't find it, we quit.

Q. How long after the erection of the first drilling rig on the NW.  $\frac{1}{4}$  of Section 30, before Dudley and



(Testimony of Orlando C. Barton.)

Martin brought in another rig?

A. Well, on the 8th of March, we got the first oil in the Lake Shore, then Dudley and Martin got busy bringing in rigs, and I can't tell you exactly. I can tell you when some of them arrived.

The WITNESS.—(Continuing.) The second rig that arrived,— [577] well, I am a little uncertain about that. It was a rig that belonged to a man named Moran, and it had nothing to do with these claims. That was an outside issue of Martin and Dudley, and they located it on Section 34, but afterwards moved it away. The first rig that I remember was a Star rig that they put on Section 28. It proved to be on the SE.  $\frac{1}{4}$  of Section 28. It was some time in the spring of 1910, I think maybe I could get that for you here. I was there at the time.

The Moran rig arrived before the summer; I think maybe I could read through my journal and find when it arrived.

Q. When was the next rig to arrive in the field?

A. Excuse me. I have been over that ground before, and I am afraid I will get it wrong. But I will ship over until July and I may overlook them.

The WITNESS. — (Continuing.) July, 1910, Martin and Dudley sent their teams after what we called the rotary rig, and they were either gone on the 4th of July, or else they returned on the 4th of July with the rotary rig, which went on the SW.  $\frac{1}{4}$  of Section 32, and there were other rigs there at that time. After that rotary was placed on the SW.  $\frac{1}{4}$  of Section 32 it remained in there, but it didn't bring

(Testimony of Orlando C. Barton.)

in the well. It was a very expensive affair, and held the other rig back. When we started in to drill the rotary, it took lots of water, and at that time, water had to be hauled eight miles, and the other rigs had to wait on the rotary rig.

Q. I would like for you to establish approximately the time when the rigs were established on the different locations involved in this proceeding, and I will ask you to state as nearly as you can, the time when the first drilling rig was established on the SE.  $\frac{1}{4}$  of Section 30. [578]

A. Well, it was about the middle of the summer.

Q. Of 1910?

A. Yes, sir. This Star rig that I told you about, that was located on Section 28, we found it was on the SE.  $\frac{1}{4}$ . Then we moved it to the NW.  $\frac{1}{4}$ , then there was an injunction put on us, a homesteader filed and got out an injunction. Then that rig was moved on to the NE.  $\frac{1}{4}$  of Section 28, and we drilled a water well. As soon as the water well was finished, why then after that we got our water there and didn't have to haul it. That is boiler water, the water was not fit to drink. We got water for the boiler. It was about the middle of July, then that Star rig was moved on to the SE.  $\frac{1}{4}$  of Section 30. I am sure I can trace that up.

The WITNESS.—(Continuing.) That was in July, 1910, when the first drilling rig was established on the SE.  $\frac{1}{4}$  of Section 30.

Q. Referring now, to Section 32, when was the first drilling established on the NE.  $\frac{1}{4}$  of Section 32?

(Testimony of Orlando C. Barton.)

A. I am woolwinding all the time. That gusher is on the NE., is it not, right close to the line there, is it not? There was a rig went on there in September.

Q. 1910? A. Yes, sir.

Q. Did this well proceed to drill until a well was brought in on this quarter?

A. No, that rig was moved on there in August, on the NE.  $\frac{1}{4}$  of Section 32. As soon as we finished the Lake Shore well, why Dudley sent Moran to move that rig on to the NE.  $\frac{1}{4}$  of Section 32.

The WITNESS.—(Continuing.) That was August 2d.

Q. What did they do with this rig on the NE.  $\frac{1}{4}$  of Section 32?

A. Well, I am a little hazy on that point. There were three rigs arrived there about the same time of Martin and Dudley's [579] and the gas rigs that I have been mentioning here, was pulled off, and went on, and it was one of the other rigs that was there at the same time as the gas rig, that did the drilling. It stayed there, it was what we called the Flynn rig.

Q. When was that moved on to this land, just approximately?

A. (Referring to book.) Well, here I see he went after the gas rig on the second of August, and they brought the other rig about the same time, and Butts was foreman, and he set the point up to go on, about all I can tell you, it was in August.

The WITNESS.—(Continuing.) I think they started drilling then, in August, 1910. Yes, it was the Flynn rig.



(Testimony of Orlando C. Barton.)

Q. When did they bring in a well?

A. Oh, Flynn drilled there all that fall and winter, and got a showing of oil, which I can show you; I have got his depths all along here. He got a showing of oil at 400 feet and kept going deeper and deeper, and getting a little more oil, until he got down the length of his rig. Then they pulled his rig off and put on a better rig, and finished the well. That well was not finished until along about April or May in 1911.

Q. When was the first drilling rig established on the NW.  $\frac{1}{4}$  of Section 32?

A. Well, all that I can remember about it is that there was an old steam rig hauled on there about the same time that Flynn commenced to drill, and they started it up and it was a very poor affair, and they got a blacksmith and a blacksmith shop there, and he was at work on the rig when Flynn was starting in on the well.

The WITNESS.—(Continuing.) That was in the summer of 1910. I can't tell you when they brought in a well on that quarter. I think the first drilling rig was established on the SW.  $\frac{1}{4}$  of section [580] 32 on the 4th of July. It might have been the 1st; one of the two. The teams were either gone on the 4th, or else they arrived back on the 4th with the rotary rig. That was not the same day that the rig was established on the SE.  $\frac{1}{4}$  of Section 30. That was July, 1910.

They set that rig up and commenced to drill right away, and he got down 400 feet right off in a couple

(Testimony of Orlando C. Barton.)

of days. It took all of Martin and Dudley's teams to haul water to it, and it used a lot of water, and in hauling water to that, the other rigs run out of water, and we had trouble and distress, and the old rigs didn't go good, and about once every week or two, Weeks, the expert on rotary rigs, started up and tried it again. And that is the way it went. He got a little showing of oil. The old rig is there yet, I guess, I don't know what became of it. They spent an enormous amount of money trying to make that rig run. That rig did not bring in a well. That rig was superseded by another rig. I can't tell you when. It was some time late in the fall that they put another rig on. Late in the fall of 1910. After they had exhausted themselves trying to make it go, why they sent another rig on there. I can not tell you when it was that the well was brought in on this quarter, I was not there. I saw the well afterwards.

Except when I was away on business for the company, after establishing my residence on Section 18 in November, 1909, I was there all the time until the 31st of March, 1911. Then I moved back to Visalia to live. I was away on business once two weeks, and at other times I would merely come to Visalia and go back, or to Hanford and go back. During that time I did not keep a record of the drilling operations of the land in question. I kept a record of what I was doing. At that time I was representing [581] the Lost Hills Mining Company, and also the Devil's Den Company.

At the time I came to the conclusion that Barrett

(Testimony of Orlando C. Barton.)

would be unable to carry out his contract, I made some effort to interest some other drillers in this field. I was doing it for the Lost Hills Mining Company.

Q. I take it they did not have sufficient capital themselves to undertake any drilling operations, is that correct?

A. Well, they wanted to get outside help to put a well down. And there was a Lost Hills Oil Company organized and the locators took stock in that. In fact nearly all the stock that was taken was taken by the locators. Well, it went through. That was the first effort.

The WITNESS.—(Continuing.) It went broke. A man named Jackson attempted to finance it and he could get no one but the locators to take stock in the company. When he dropped out Barrett came in, and his money was largely locator's of the Lost Hills that went in to that deal.

Q. The Barrett company?

A. Yes, sir. But we were not trying to make any outside company do it, we were helping—

Mr. REDDING.—Let me understand. The Lost Hills Oil Company, that antedated Barrett?

A. Yes, sir.

(Mr. Murphy resuming.)

The WITNESS.—(Continuing.) Regarding a proposed drilling in the Lost Hills, I interviewed a man that was drilling for the G. R. A. Company, and also trying to get a man named Jake Bier, that lives east of this town: he is a good well driller, and I tried everything I could to get him to go over there and

(Testimony of Orlando C. Barton.)

drill a well. If he did, I knew he would get it.  
[582]

I was not successful in persuading any of these other parties to undertake drilling operations, until Ed Dudley finally agreed to it. I had been after him for ten years to do it. He operated in Bakersfield in 1900, and he was a driller, and his father was a driller before him, before they were in the oil business. Gas wells and water wells. His father was a driller, and he learned it from a boy.

Dudley had not been drilling over on the Devil's Den property sometime prior to 1909. Dudley drilled at Bakersfield in 1900, and then the rig that he was interested in, his company moved the rig over to the Devil's Den on Section 27, township 25 south, range 18 east, and drilled a hole there. But Dudley was not there himself. His rig did the drilling. At that time he was associated with Martin. Well, I am not sure, I don't know when they went into partnership; it was about that time they went in as partners. I knew Dudley personally. I did not know Martin till 1900, and I think he was not associated with Dudley in 1900, when I come to think about it.

In the first place, in the summer of 1909, Dudley was drilling the Lake Shore well. Well, hold on, no, it is me that is wrong. He was not drilling in 1909. He was not drilling for other parties on other lands during the summer of 1909. He was not drilling at all.

Q. Did he have more than one rig, do you know?

A. He didn't have any rig when he went into this

(Testimony of Orlando C. Barton.)

contract with the Lost Hills Company; his rig was one that he had made.

The WITNESS.—(Continuing.) That was the rig that was established on the NW.¼ of Section 30. Was one that he had made. I first saw Dudley in regard to a proposition of drilling on [583] these lands in the year 1900. He was not interested at that time at all; the rig that he owned an interest in was moved over there that year, but he did not come himself. It was moved over to Section 27, township 25, range 18. That is the Devil's Den country.

Mr. Dudley did not show any interest in the proposition of drilling in the Lost Hills, and I could not get him to go there until the year 1909. It was early in the year, January or February. It was after Barrett had gone away, himself. There was one of Barrett's men there, though, at the time.

Q. What time during the year 1909, would you say?

A. Well, it was early in the year when Dudley went there with me the first time.

Q. January, February or March?

A. Yes, it was in the winter; I haven't any account of it.

Q. Where did you go with him, what did you show him at that time?

A. Well, Martin and Dudley came over there several times, and I was staying there on Section 22, in township 25, range 18.

The WITNESS.—(Continuing.) About fourteen miles from these lands. And I showed them all



(Testimony of Orlando C. Barton.)

along the line from Coalinga nearly to McKittrick. They made numerous trips. They did not do anything, only talk about it. Early in the spring of 1909 they got interested in Section 27, township 24, range 18, and they spent some money there. That was in the Devil's Den country. They were at that time wanting to get in to the oil business, they got in on that section.

I was better acquainted with Dudley than I was with Martin.

Q. And most of your negotiations were done with Dudley, were they? [584]

A. Well, I discussed the question of drilling with Dudley more than I did with Martin.

Q. When did Dudley or Martin first show any inclination or interest, or show interest in drilling in the Lost Hills? A. In the year 1909.

The WITNESS.—(Continuing.) They manifested that interest by wanting to go there to the hills and I went with them. I took them to what is called the Bubble on Section 19. That was 1909. It was early in the spring, I can't tell the month. That was the first time I took them there. Both of them; I think all three of them. Two Dudleys and Martin. They did not enter into any negotiations to do any drilling at that time, I did the talking myself and showed them the superior indications of oil and tried to explain them, and tried to explain it to them so they would understand it. It was difficult to get them interested in the proposition up to the time they agreed to go, then they all at once concluded to go and take it up. They finally agreed to go some time



(Testimony of Orlando C. Barton.)

in the year 1909. I can't place the time, I was with them so much, that it might have been May or April, and it might not have been until October, but it was sometime when we were together.

Q. They did not sign any contract, however, until October 27th, 1909? A. Yes, I believe so.

Q. That was the first time that they were bound to anything by any contract?

A. Yes, sir; they were not bound until they signed the contract.

Q. And prior to the time of the signing of the contract they did nothing in the way of development work on the land in question, did they? [585]

A. I think they did. I saw them on the land, that is I saw Martin on the land.

The WITNESS.—(Continuing.) I just saw Martin on the land. But I couldn't say that Martin was doing any development work at that time.

Q. He had no authority up to that time, to do any work did he?

A. Well, we would have been glad to have had him go to work any time, there would have been nobody kicked about it.

Q. Do you recall the substance of matter of these locations with Mr. Hamel? A. Several times.

Q. Several different times? A. Yes, sir.

Q. And on several different occasions, did you sign affidavits purporting to show the facts in the case?

A. I signed an affidavit before him, and afterwards there was something added to it, and I signed it before Mr. Clack.

(Testimony of Orlando C. Barton.)

Q. Signed an affidavit before Mr. Hamel on June 23, 1914, at the time Mr. Hamel was investigating the *bona fides* of the locations, isn't that correct?

A. I guess that is correct. I don't remember the time.

Q. And some time later you signed another affidavit before Mr. Hamel on October 24th, 1914, in which was incorporated certain data with reference to the drilling operations during the spring of 1910. Isn't that correct? A. Well, I guess it is.

Q. And then subsequent to that you signed another affidavit prepared by Mr. Hamel and executed before J. S. Clack, notary public, in which substance of both the former affidavits was [586] incorporated, is that correct?

A. It is correct, only I made a slight correction or two.

The WITNESS.—(Continuing.) At the time I signed the affidavit before Clack I made a correction in the former affidavit.

Q. Referring to the Square Deal Company with which Butts was connected, and also Barrett, I find this statement: "Later this company failed. Barrett could not raise enough money. They hauled away two of the houses on 18, and on March, 1909, the Square Deal option on the location lapsed." Is that correct?

A. Well, if that is wrong, I am wrong.

A. Was it your understanding that at that time, that Barrett's contract lapsed in March?

Mr. REDDING.—No, if you will allow me, Mr.

(Testimony of Orlando C. Barton.)

Murphy, I think you will agree this is the fact; the Barrett contract was between the locators as individuals, on one side, and Barrett on the other, and it expired on June 1st, 1909. Barrett, in order to raise more money, formed the Square Deal Company, and gave the Square Deal Company an option on the results of his contract with the locators, and that lapsed in March, 1909. But that had nothing whatever to do with the contract between Barrett on one side, and the locators on the other, except that there were some stockholders in the Square Deal Company who were locators. That true?

A. Yes, there were some.

Mr. REDDING.—But that was a parenthetical institution, incidental to the Barrett contract, but the lapsing of the option of the Square Deal Company had nothing whatever to do with the lapsing of the contract between Barrett and the locators.

Q. (By Mr. MURPHY.) Did the lapsing of the Square Deal Company have any influence on the incorporation of the Lost Hills Mining Company?

A. If I remember, we organized the Lost Hills Mining [587] Company immediately when the Square Deal Company lapsed. We organized in March, 1909. I began to think about that time that Barrett would not be able to carry out his contract.

Q. (Continuing.) “The locators immediately organized themselves into the Lost Hills Mining Company. J. H. Butts was elected president, and I was a director. I cannot remember the others. The company was capitalized at \$38,600.00, or at the rate

(Testimony of Orlando C. Barton.)

of \$10.00 per acre for their claims. We intended to drill ourselves, in the fall. On July 10th, I resigned the position of superintendent of the Devil's Den Consolidated Oil Company." Was that true, that the Lost Hills Mining Company intended to do the drilling?

A. Yes, sir; at the time they incorporated. They did not pass any resolutions to that effect, but that is what I wanted done and advocated, that we had fooled along with outsiders long enough and we ought to get busy and drill. I advocated that.

The WITNESS.—(Continuing.) The only question was to raise the money.

Q. (Continuing.) "In the year 1909, the firm of Martin and Dudley began to show some interest in the oil business."

A. Yes, sir.

The WITNESS.—(Continuing.) They begun to get busy and go over there and make inquiries about oil, and wanted to get in, and to come in on this Section 27, in township 24, range 19, and I just saw a note of mine where I was with them on the 4th of March.

They came frequently to the west side. I mean the Devil's Den country. The oil fields we call the west side when we are here, the oil fields are all on the west side. That was fourteen miles from the Lost Hills property. I showed them around. Among other places I took them to the Lost Hills. Others were Palo Prietta, Antelope, the anti-clinal fold to the Kettleman Hills, Bitter Water country,

(Testimony of Orlando C. Barton.)

and down to McKittrick and Temblor, and all along the line. [588]

My object in showing them that property was to be with Ed Dudley as much as I could and get him to go to the Lost Hills, that was my object. I wanted to show him that the Lost Hills was the best proposition.

Q. Was he looking over this property at your invitation, or were you doing it at his request?

A. No, I was looking over it at their interest, that is to say, these trips when I was running up and down the land, that they would go over there and get me and take me with them.

The WITNESS.—(Continuing.) They were not confining their examination to the Lost Hills property at that time. They were looking over all the oil territory in that part of the country. They were actually visiting over there in the Devil's Den county or what you term the west side; they were interested there in March, 1909.

Q. "On October 3, 1909, I saw the firm's automobile in front of S. Bush's place at Hanford, after I had pictured to them the great amount of oil there must be at the Lost Hills, and assured them it could be reached inside of 600 feet, they agreed to take hold and develop claims." Now, what happened on October 3, 1909, why did you refer to that date?

A. I suppose I have got it in some of my journals some place, but that was the date I met them there in Hanford. I didn't go there with them, I was already in Hanford.



(Testimony of Orlando C. Barton.)

Q. What was the significance of seeing their automobile outside of S. Bush's office?

A. Well, I was traveling up the street and I went over to have another talk with them about the Lost Hills.

The WITNESS.—(Continuing.) At that time they had not agreed positively to do any drilling. We had talked it over and over and over. [589]

Q. And you were still trying to interest them in taking hold of this drilling proposition, were you?

A. Yes, sir.

Q. "Ed Dudley said he would drill the first well, himself. I went instantly to J. H. Butts and got him to see them. J. N. Hoyt came along, and between the 6 of us, we agreed on all the essential points of a contract to develop the claims on the Lost Hills."

A. Well, that is right.

Q. Was it on October 3, 1909, that you came to that agreement?

A. Well, I guess it was fresh in my mind when I made that affidavit, fresher than it is now, and I suppose it is correct.

Q. Well, would it refresh your recollection or establish any clearer if you referred to your memorandum?

A. I didn't have this book with me at the time but I will look at October 3d, and see; that is the date that I was at Hanford.

Q. That you saw the firm's automobile at Hanford?

(Testimony of Orlando C. Barton.)

A. That was the day we were talking about this forenoon that I told you about.

The WITNESS.—(Continuing.) On September second I was with Martin and Dudley on the west side, but I don't hardly think that is the time. My note does not cover that date. I was at the west side. That would be in the Devil's Den country. That note does not show that I was on the Lost Hills property at all on that date. I am not sure that I have any note that covers October 3d, 1909. It is possible that I have. When I wrote that—that is in my report to McLain, and I hunted that up at that time. At the time I made this affidavit. This is a part of the report that I made to McLain.

Q. Where did you get the date, October 3d, 1909, that [590] you furnished in this affidavit?

A. Well, I hunted it up and got it some place, I can't tell you. It is not here, I skip from September clear down to October 11th.

Q. It is not in your journal?

A. It is not in this journal; I expect I have got it.

Mr. REDDING.—They have called your attention to an entry here, that you were with Martin and Dudley on the west side in September?

A. Yes, sir.

The WITNESS.—(Continuing.) I mean by the west side, at that time, at the Niagara well on Section 22, in township 25, range 18. That is the old Consolidated well, the third one they drilled.

Q. Did you go from there with them over to the Lost Hills?

(Testimony of Orlando C. Barton.)

A. I am a little hazy about it myself. That says October 3d, and I would not like to say I made a mistake, and said October 3d, when it was September 3d.

Mr. MURPHY.—(Resuming.) Q. This memorandum says you were in Hanford and saw Martin and Dudley's automobile in front of Ed Bush's office? A. Yes, sir.

Q. Apparently a different occasion from the memorandum which says you were at the Niagara well in September second, 1909?

A. I think it is different. But this is September second, I suppose they got in with me and went over the next day; now, I am not willing to say it is just the same. I think the date is right; I may possibly find where I got it.

The WITNESS.—(Continuing.) This date, October 3, 1909, was the date as shown in my report to McLain. That is correct. That report was correct. This is the report, as I understand it, a correct copy of it. Yes, I think you gave me the report the [591] last time you were down here.

Mr. HAMEL.—I think you have a copy of it?

A. Yes, sir.

Mr. MURPHY.—You wouldn't state that this date, October 3, 1909, as shown in the affidavit, is correct? A. Yes, sir; it is correct.

Q. Proceeding: "Judge Wallace afterwards wrote out and prepared the contract." Those are the contracts which have been referred to as the contracts for drilling operations between the Lost Hills Mining

(Testimony of Orlando C. Barton.)

Company, and Martin and Dudley?      A. Yes, sir.

Q. "They were to have half of all our claims that they developed, except those on 18, where they were to receive more than one-half." Continuing: "On February 20th, Ed Dudley commenced drilling." That date is correct, is it not?

A. Well, it won't miss it over one day. I had it in my head that it was the 19th, but I suppose the 20th is right.

Q. "On January 19th they all moved over to this house that is on the NW.  $\frac{1}{4}$  of Section 32—they sunk a pit and set the rig over it. On February 20th, Ed Dudley commenced drilling. There was first six feet of gypsum, then 60 feet of tough sandstone, the cementing material of which was selenite?"

A. Yes, sir; it was the 20th, I found the note.

Q. "Then came a very hard, calcareous sandstone. On March 8th, 1910, at 3:50 P. M. we set fire to the gas that came from the well."      A. Yes, sir.

Q. "I quote from my journal; it burned with a yellow and blue hydrocarbon flame. Harry brought up the tools a little before sundown, the bit would not screw off, and they had trouble to make the valve stay open. At exactly sundown they got the valve open, the pulp showed spots of oil, one of them was at least 5 inches across. Numerous splotches of oil run down in every direction. So [592] it is at last proved that there is oil in the Lost Hills. The combination tool was cracked entirely around where it was welded to the jars; it must go to a machine-shop. The formation is sandstone, the cementing

(Testimony of Orlando C. Barton.)

material is calcite." That memorandum was taken from your original memorandum?

A. Yes, sir. Here it is, right here, I was watching.

Q. You verified it as I have read? A. Yes, sir.

Q. "The well was at that time 160 feet deep."

A. Now, that is as far as I have mine. I quit the journal now.

Q. "No more drilling was done in March, but little in May or April. On June 3d the gas made such a noise that Dudley corked the well with sandbags."

A. That is right.

Q. This memorandum is with reference to the well known as the Lake Shore Well, on the NW.  $\frac{1}{4}$  of Section 30? Is that correct? A. Yes, sir.

Q. "We had great trouble to stop the noise so people would not hear it on the outside. The well was fenced in. Little drilling was done in June. Dudley was setting up rigs in other places, drilling on Sections 28 and 34."

A. That is as I recollect it, as near as I remember it.

Q. Now, with reference to Dudley's drilling on Section 28 and 34; was that drilling covered by any contract that the Lost Hills Mining Company had with him?

A. Yes, sir; on Section 28, it was.

The WITNESS.—(Continuing.) Our contract covered Section 28. It did not cover Section 34. Dudley's interest on Section 34 at that time was a location. I was interested in it, I think, too. It was



(Testimony of Orlando C. Barton.)

just a private location. There was no company. There was just one location. It was the NW.  $\frac{1}{4}$  of Section 34. He had a rig there drilling; that is Dudley. Walter Moran was drilling for [593] Dudley on Section 34. He is the man that brought in the Lake Shore well.

Q. Proceeding with the affidavit: "On June 15th, Dudley again started the Lake Shore rig?"

A. Yes, sir.

Q. That is the rig on the NW.  $\frac{1}{4}$  of Section 30?

A. Yes, sir.

Q. "The pulp showed oil. On July 17th Walter Moran fixed an apparatus so we could use gas from the well under the boiler. On July 19th, the gas blew a lot of mud and water out of the well." Is that correct? A. That is correct.

Q. "On July 21st Dudley and all hands were sick; they went away"—that is, July 21st, 1910— That is the year, isn't it?

A. Yes, sir. "Ed, and all the other hands are gone." That is the 21st.

Q. That refers to July 21st, 1910?

A. Yes, sir; that refers to July 21st, 1910.

Q. "Walter Moran drilled, Harvey Chase helped. Pearl Moran cooked. I was too sick to go with Dudley. We now know it was the gas that made us sick. I will make a few quotations from my journal: July 23d, Martin and Gray arrived. Martin turned the casing, end for end. The hole is 366 feet deep. The casing is about 300 feet. The shale gets darker. July 24th at 11 A. M. the hole was 405 $\frac{1}{2}$  feet deep.

(Testimony of Orlando C. Barton.)

Formation soft shale covered with oil. July 26th, well 442 feet deep, casing stuck at 306 feet by the damaged shoe. Large shale with oil in the cracks. July 26th, 463 feet oil showed more plentiful. It is a heavy oil. Found blue sandstone and shale with a little gravel. July 26th, bailed out again, 4 barrels of oil this morning. We saved a 5-gallon can [594] of it. I have a bottle full. Matthews brought Ed Dudley, Arnet Ireland and Jim Brune. July 29th, well about 527 feet. There is 400 feet of oil in it. Think it is about 24 fine. It is now a 200 barrel well. Moran drills about 525 feet. Drill struck hard sandstone. July"—date not given there. A. It is the 30th here.

Q. "Ed bailed out 25 barrels of oil. It only lowered the oil about 12 feet. It filled again in a few minutes. It is a 300 barrel well or more. It threatens to flow. Ed. went away." This is the Lake Shore well on the NW.  $\frac{1}{4}$  of Section 30, or the first well to be brought in in the Lost Hills there, was it not? A. Yes, sir.

The WITNESS.—(Continuing.) I did not keep a memorandum of the other wells that were being drilled, only incidentally. I had other memorandums of the Flynn well on the NE.  $\frac{1}{4}$  of Section 32, which covered part of it, but not all of it.

After this well on the NW.  $\frac{1}{4}$  of Section 30, known as the Lake Shore, was completed, the rig was moved over to the SW.  $\frac{1}{4}$  of Section 18. They began preparations right away. It was probably 3 weeks

(Testimony of Orlando C. Barton.) •

before it was moved over there. I think I can find that in here.

Q. Proceeding with the affidavit: "The next rig to start drilling by Martin and Dudley was the Star rig on Section 28, township 26, range 21, on June 13th, 1910." That correct? From reference to your memorandum?

A. Well, this does not cover that ground, but then that is correct.

The WITNESS.—(Continuing.) When I made this affidavit I had this note here, for one thing; Took June 13th, Ed Arnett, Comber, and I found the true corner of the NE.  $\frac{1}{4}$  of 30. Well, he was drilling down there then, and I figured it out from this note, I [595] suppose.

Q. "Dudley afterwards, the Walter J. Moran rig on Section 34 started, the Star rig was moved twice on 28, first to the NW.  $\frac{1}{4}$  then to the NE.  $\frac{1}{4}$ . The next rig to start drilling was on the SW.  $\frac{1}{4}$  of Section 32. It was the rotary rig. It arrived there on July 8th, 1910, and commenced drilling immediately." That is the rotary rig about which you testified previously?

A. That was the rotary rig I was telling you of,

A. "The rig ran whenever they could get water for it, the rest of the season they only got down between 400 and 500 feet, and I don't think got any oil." Is that correct?

A. Well, they just got merely a showing of oil, that is all.

Q. "Martin and Dudley were interested in the

(Testimony of Orlando C. Barton.)

north end of the Lost Hills, they brought in more than one rig and set up there, all north of sections 30 and 32." Now, I wish you would explain that.

A. North of 30 and 32?

A. Yes. "They were interested in the north end of the Lost Hills."

A. Well, yes, the Lost Hills Mining Company had nothing to do with that proposition up there.

The WITNESS.—(Continuing.) They were interested on their own behalf on this other property, that was their own enterprise at the north end of the hills. It covered section 29. They sent a Keystone rig up to section 29, township 25, range 20, along in the summer. It was hot weather. [596]

(Continuing.) In 1910 I went up with them. And that rig started up and run, but they got a man by the name of Perkins to come and run that rig. They didn't try to run it themselves.

Q. How many rigs did they have operating besides the one they had for the Lost Hills?

A. It just depends on the date. I will make a general explanation. Martin and Dudley went and bought all the rigs they could get, they bought all the rigs there was absolutely in the oil belt along here, and they bought a few rigs in San Francisco. They bought every rig there was for sale in central California, and started them for the hills. Their idea was to cover all of our claims, and the outside claims, every man that had a claim and wanted drilling, went to Martin and Dudley to have it done after the Lake Shore well was struck. I might estimate very

(Testimony of Orlando C. Barton.)

closely how many rigs there were there, but I will just say 35; it may not be exact.

The WITNESS.—(Continuing.) They started them to coming in there in August, 1910, I think, and kept coming all the time, and I could not give the numbers.

Q. So that statement that Martin and Dudley were interested in the north end of the Lost Hills would cover these other claims of themselves and other parties for whom they had contracts for drilling. Would that be correct?

A. Well, that means those other parties, it means Section 29.

The WITNESS.—(Continuing.) There were other claims in Section 6. Coming south, the next rig was on Section 8.

Q. And any other sections?

A. We were talking about the north end of the Hills?

Q. Yes, sir. [597]

A. Well, that is all, one rig on 29, and four rigs on 6, and there was two on 8.

Q. And how many on Section 34? A. One.

Q. Proceeding with the affidavit: "I think the next rig was the Prestage rig which arrived September 24th, 1910, on the NE.  $\frac{1}{4}$  of 30." That would be the Devil's Den.

A. I wish to make a correction. I think we have gone over the ground before. The Star rig from Section 28 was moved up to the SE.  $\frac{1}{4}$  of 30, before Prestage came there.



(Testimony of Orlando C. Barton.)

Q. But that statement that the Prestage rig was the next rig would be correct?

A. Well, saying new rigs that had not been in the field before.

The WITNESS.—(Continuing.) The NE.  $\frac{1}{4}$  of section 30, that is what is known as the Devil's Den Consolidated Location.

Q. On August 2d, 1910, a gas rig was moved from the NE.  $\frac{1}{4}$  of section 32, but did not start drilling for a long time. Is that correct?

A. That was not the rig that drilled the well there.

Q. "Something was wrong with it, and it would not start. A short time after the arrival of the Prestage rig, W. K. Flynn brought in a gas rig and placed it on the NE.  $\frac{1}{4}$  of section 32, and it remained there until March, 1911. Along in November, 1910, the Lost Hills Company entered into a new contract with Martin and Dudley, in which they required Martin and Dudley to put a drilling rig on all of the Lost Hills Mining Company's claims, and proceed to drill without any unnecessary delay." Do you recall such a contract being entered into?

A. Yes, sir.

The WITNESS.—(Continuing.) The purpose of this contract [598] was to get simultaneous drilling, and not consecutive drilling upon the claim. Not let one claim wait on another. It was to drill on all the claims instead of moving the rig and drilling consecutive wells.

Up to that time we expected them to develop first

(Testimony of Orlando C. Barton.)

one claim, and then after that, develop the claims as fast as they could, reasonably; that was, to do the work with reasonable diligence, to develop the other claims. But this new contract called on them absolutely to go to drilling on all the claims. That was the purpose of it.

Q. Proceeding: "Before the close of the year, Martin and Dudley had a drilling rig on all of the Lost Hills property claims."

A. Yes, sir.

Q. That included the land in question?

A. Yes, sir.

Q. Proceeding: "Martin and Dudley had extended their operations to other parts of the field, north and south, and some of the Lost Hills Company people were afraid Martin and Dudley would neglect the Lost Hills Company's claims. That is the reason the contract of November 10th was entered into."

A. That is the same reason I just gave you. They called on them to drill on all of the claims at the same time.

Q. "For myself, I was satisfied that Martin and Dudley were doing all they could to develop these claims, but I was instructed to hold the big stick over them, and make them fulfill the letter of their contract. There were no other rigs on sections 30 or 32 during the year 1910, other than I have mentioned." Continuing with the affidavit, I find this statement, "Martin and Dudley had about 12 men employed on July 1st, 1910." Now where [599] were those men employed? A. On July 1st?

(Testimony of Orlando C. Barton.)

A. Yes, sir.

A. Well, they were employed three men cutting brush, one team hauling it, that makes four men. There were two men at the rig, and there was a teamster hauling all the time, and the carpenters were busy, there were fully a dozen.

Q. Was that on the NW.  $\frac{1}{4}$  of section 30, that Lake Shore well?

A. Well, sir—well, now—

Q. What I mean is, were all those 12 men employed there at the Lake Shore well at that time?

A. No, part of them were employed down on section 28, and on the different claims. Dudley was drilling before that on section 28.

The WITNESS.—(Continuing.) The situation then is, at the present time, that the Lake Shore well, on the NW.  $\frac{1}{4}$  of section 30, was spudded in on February 20th, 1910. And any other wells which were brought in on any of the other locations involved in this proceeding were brought in subsequent to that date, or spudded in subsequent to that date. They were not spudded in after the discovery was made in the Lake Shore well; there were wells started before the discovery, on the land involved in this proceeding.

I gave July 27th as the date of the discovery of the Lake Shore. Well, the discovery of oil was the 6th of March, but the well was finished on the 27th of July.

Q. What was the nature of the discovery in March, on the Lake Shore?

(Testimony of Orlando C. Barton.)

A. Well, in the first place, the hydro-carbon gas showed up stronger; we could set fire to it, and it would blaze up three [600] or four feet. That showed oil was there, and when we would bring up the bailer and empty the bailer into the flume, and it runs off and forms a pond, and as the water would run off, it forms a film of oil over the top of the muck. And that film of oil shows the colors of the rainbow that we know it is oil. When it shows the rainbow colors, it is oil, it is not grease.

Q. You got the color of oil, but you did not get oil in the winter months?

A. We did not get oil in commercial quantities, but we made a discovery that it was entirely satisfactory.

The WITNESS.—(Continuing.) The depth was 160 feet. We got a flow of oil in the Lake Shore on the 27th of July. Previous to that the oil had been continuously increasing all the time, after Dudley started the rig up the last time. That was about the 1st of July. That hard calsite was very difficult to drill, and it kept breaking his tools continuously. That would be more or less shown in my memorandum which I have verified.

Mr. HAMEL.—Q. What other wells were in drilling on these lands in question at the time the discovery was made there?

A. That well on the SW.  $\frac{1}{4}$  of section 32 is one.

The WITNESS.—(Continuing.) That is the well where they put the rig on in July. I cannot tell you whether that is the only one. I would have to read

(Testimony of Orlando C. Barton.)

and look over my numerous affidavits to tell you that. There are other men who know more about it than I do.

Mr. MURPHY.—That is all. [601]

Mr. HALL.—Now, I desire to offer and read in evidence in all three cases the deposition of George A. Coffey, it being a certified copy.

The COURT.—Were these depositions taken in a proceeding in the Land Office referred to this morning?

Mr. HALL.—Yes.

Mr. PIER.—The testimony is being taken at the present time.

Mr. DUNNE.—The trial is going on still.

Mr. HALL.—It is still pending. It is not going on just now.

Mr. DUNNE.—Not just at this present minute.

The COURT.—Suppose it should turn out that the land office reached one conclusion and this Court another?

Mr. HALL.—On the same facts?

The COURT.—On the same issues.

Mr. HALL.—I think it will be reviewable by this Court.

Mr. DUNNE.—Do you think so?

Mr. HALL.—Yes. I might say in connection with the remarks of counsel as to the proceeding in the land office, that application has been made by Mr. Redding in the Visalia proceeding to discontinue it until some determination is made of the court proceeding.



(Testimony of Orlando C. Barton.)

Mr. DUNNE.—On the question of jurisdiction.

Mr. PIER.—Mr. Redding has asked to have the land office proceeding continued till we could dispose of the court proceeding, and he notified them that as soon as he could get back he would take up the land office proceeding as soon as the court proceedings permitted his time to be devoted to that purpose.

(Thereupon Mr. Hall reads said deposition, which is as follows:) [602]

**Testimony of George A. Coffey, for the Government.**

GEORGE A. COFFEY, a witness produced on behalf of the United States, being first duly sworn by L. B. Hayhurst, a notary public in and for the county of Fresno, testified as follows:

**Direct Examination.**

(By Mr. MURPHY.)

The WITNESS.—I live at Lost Hills. I am a well-driller.

Q. How long have you been engaged in well-drilling?

A. It has been pretty nearly five years since I went to drilling.

The WITNESS.—(Continuing.) I had been connected with the drilling business prior to that time in the capacity as tool-dresser for about three years, part of the time in the Universal, and the rest of the time in the Midway field and Sunset field.

I first came to the Lost Hills in May, 1911. I

(Testimony of George A. Coffey.)

started work for the Universal Oil Company. Beginning at that time, I was a tool-dresser for the Universal Oil Company, and afterwards driller.

Q. Where was your camp first located?

A. It was right by the old Lakeshore well. Must have been on the NW.  $\frac{1}{4}$  of 30.

The WITNESS.—(Continuing.) I don't know the township and range. But at any rate, my camp was close to the discovered well on the NW.  $\frac{1}{4}$  of 30, known as the Lakeshore No. 1 originally. Afterwards that well became known as Universal No. 1 on 30.

Q. What was the status of the oil development work on the NW.  $\frac{1}{4}$  of 30 in May, 1911, at the time you arrived there?

A. Well, the only producing well was the Lakeshore well.

Q. Number 1?      A. Yes, sir.

The WITNESS.—(Continuing.) That was pumping at that time. I suppose it was being operated by the Universal Oil Company at that time. It was being operated, and I suppose they were operating [603] it.

Q. Were there any other derricks or drilling rigs on the NW.  $\frac{1}{4}$  of 30 at that time?

A. There was a portable; but it must have been near the center of that quarter.

The WITNESS.—(Continuing.) I don't think that was in operation. There had not been any discovery of oil made there. I can't say positively whether it was a complete drilling rig or not. It was

(Testimony of George A. Coffey.)

there for several months after I arrived, but I couldn't say just how long. The well at that point was never completed during the time I was there.

I remained with the Universal Oil Company in the Lost Hills after I started to work for him in May, 1911, until January 24th, this year. I am in their employ at the present time. I was only away two months. I am now working on Section 32, at Lost Hills. Now I stated I had been in the employ of the Universal Oil Company since that time. I was in charge of the Devil's Den Consolidated up on the north end for about a year; but it is practically the same. It was under the same management. That was in the Lost Hills, on Section 30. I also had some Universal wells in the same section.

Q. What was the status of the oil development work on the SE.  $\frac{1}{4}$  of Section 30 in May, 1911, at the time you arrived?

A. There were no producing wells.

Q. Had there been any discovery of oil made on that quarter at that time?

A. Not that I know, no, sir.

Q. Was there any evidence on the ground which would indicate that the discovery had been made?

A. Not that I ever saw.

Q. Were there any derricks or drilling rigs on that quarter at that time? [604]

A. There was a portable.

The WITNESS.—(Continuing.) It must have been located in the southeast corner.

Q. Was it being operated at the time you arrived

(Testimony of George A. Coffey.)

there? A. No, I think not.

The WITNESS.—(Continuing.) I don't know how deep the well was at that time. It must have been in the neighborhood of 300 feet though.

Q. What was done with the rig, or what was done at that well?

A. We tubed it and put it to pumping for water.

The WITNESS.—(Continuing.) It must have been the latter part of May, or the first of June, in 1911, that we did that. That well was never drilled down to oil.

I don't know what became of the rig that was standing there at the time I arrived. It was used to pump that well we were using the water from, there. It was moved away afterwards. There was no other derricks or drilling rigs on the SE.  $\frac{1}{4}$  of 30 at that time that I can remember at present.

Q. Coming now to Section 32, what was the status of the oil development work on the NW.  $\frac{1}{4}$  of Section 32, in May, 1911, at the time you arrived in the Lost Hills?

A. Well, there had been no discovery of oil there at that time, so far as I know.

Q. Well, were there any drilling rigs or derricks on this quarter?

A. There was a portable.

The WITNESS.—(Continuing.) It must have been located close to the center of the quarter. I think it was not in operation. I think a well had been started. That well was never completed. I [605] can't say how long the rig remained over that

(Testimony of George A. Coffey.)

hole. It was afterwards removed and abandoned.

Q. Were there any other drilling rigs or derricks on the NW.  $\frac{1}{4}$  of 32 at that time?

A. They had started a standard derrick, I think, when I came out there. I think they had just started that. That was Number 2 on 32.

The WITNESS.—(Continuing.) Mr. McLaine must have done that work. That was the Universal's work. That was located in the northwest corner of the NW.  $\frac{1}{4}$  of 32.

Q. And that had just been started, you say, by the Universal?

A. I think it had been started when I came out there. I wouldn't be positive about that. If it had not been, it was started within a day or two after I came.

The WITNESS.—(Continuing.) That was a well which I afterwards worked on myself.

There had been no discovery of oil on the SW.  $\frac{1}{4}$  of 32 in May, 1911, at the time I arrived in the Lost Hills.

Q. Were there any rigs or derricks standing on the land? A. I think there was a portable.

The WITNESS.—(Continuing.) It must have been located somewhere near the center of that quarter. I can't say for sure that it was in operation, but I think it was. A well had been started. I don't know how deep it was. That well was never completed. It was abandoned. I don't know what became of the drilling rig. It was moved away. I can't say how long afterwards. That was the only



(Testimony of George A. Coffey.)

rig I remember standing on the land at that time on that quarter.

Q. What was the status of the NE.  $\frac{1}{4}$  of Section 32 in May, [606] 1911, at the time you arrived in the Lost Hills?

A. Well, I don't just exactly know hardly where the boundaries of the NE.  $\frac{1}{4}$  of Section 32 would be, what wells are on that quarter now.

Q. I will ask you this: Was Mr. H. E. Covey drilling on that quarter at the time you arrived, was he drilling a well?

A. He was drilling a well that was No. 1 on 32 at that time.

The WITNESS.—(Continuing.) A discovery had been made at that time.

Q. Was he still working on the well, or working around the well? A. Yes, sir.

The WITNESS.—(Continuing.) That well was afterwards known as the No. 1 on 32. I am not quite sure whether it was on the NE.  $\frac{1}{4}$  or not. If it was on the NE.  $\frac{1}{4}$  it must have been down pretty close to the SE.  $\frac{1}{4}$ . Must have been pretty close to the line. There was no other wells on that NE.  $\frac{1}{4}$  either drilled or being drilled, that I know of.

I don't know whether they had struck oil or not in the Prestage well at that time. They were working, I know. If they hadn't they were still working on it.

Q. Well, was it your idea that the Prestage well was on the NE.  $\frac{1}{4}$  of 32?

A. Well, my idea was that both of them must be

(Testimony of George A. Coffey.)

either on the SE.  $\frac{1}{4}$  or very close to the line.

Q. With the exception of the well which Covey was working on, known as Universal No. 1 on 32, and the Prestage well, were there any other wells, either drilled or being drilled, on the NE.  $\frac{1}{4}$  of 32 at the time you arrived there? [607]

A. Well, there was a portable rig stood out below where the barn stands now. I don't know whether that is on the northeast quarter or the northwest quarter.

Q. Well, isn't that the rig you had in mind when you said there was a portable on the NW.  $\frac{1}{4}$  of 32?

A. It may be. It is between—well, it is right close to No. 32 on 32. Possibly is not over 75 yards from that rig.

Q. Well, isn't that the rig you had in mind when you described what the status of the NW.  $\frac{1}{4}$  of 32 was?

A. Well, is No. 32 in the NW. quarter?

Q. Yes, I understand it is. You say that this portable that you have in mind was close to the barn?

A. Yes, sir.

Q. That is the barn of the Universal Oil Company?

A. Yes, sir.

Q. Well, wasn't that the rig which was known as Greasy Jim?

A. I never heard that name.

Q. Can you recall any other rigs which were standing on any of these quarter-sections at that time, in addition to the ones you have enumerated?

A. No, sir; I could not.

(Testimony of George A. Coffey.)

Q. Well, what was the character of these portable rigs Mr. Coffey?     A. How do you mean?

Q. Were they sufficient to drill oil wells?

A. Well, I don't believe that I could say whether they are or not. I never worked on a portable.

The WITNESS.—(Continuing.) My experience has been on Standard rigs. They are larger rigs. Well, I say I never worked on a portable. I dressed tools on a portable a few days up on [608] Section 18. But these portables, I don't know as I was ever right to them. I probably passed by them but never paid any particular attention to them at all. I could not say whether they were fully equipped to do drilling work or not.

Immediately after I started to work for the Universal in the Lost Hills, I dressed tools for a while, and assisted in connection with the drilling of Number 2 on 32 in the northwest corner of the NW.  $\frac{1}{4}$  of 32. I think we were in the neighborhood of 90 days on the well. I think we drilled about 800 feet deep. We made a discovery of oil. It was a producer.

There were other wells being drilled on that NW.  $\frac{1}{4}$  during that time, or beginning at that time. Discoveries were made in them.

Q. Where were they located?

A. Well, it was Number 3. It must have been on *the in* the southern part of the quarter-section.

The WITNESS.—(Continuing.) I don't know whether Number 3 was on the SW.  $\frac{1}{4}$ . I think it was on the NE.—or the NW. But No. 3 is the well

(Testimony of George A. Coffey.)

I had in mind. They made discovery in No. 3 before we did in Number 2. It was producing for a time.

Q. Referring again now to the portable rig, which you say was standing on the SE. of 30, and afterwards became a water well, did you do any work on that yourself? A. Yes, sir.

The WITNESS.—(Continuing.) We put in tubing and put it to pumping. H. B. Ailman assisted me in that work. It must have been done in the early part of June, in 1911. I do not recall how much tubing I put in there. [609]

Cross-examination.

(By Mr. PERKINS.)

The WITNESS.—When I went to the Lost Hills in May, 1911, Mr. McLaine had arrived there to take charge. I don't know how long he had been there when I arrived. It is my impression that he had been there only a short time. Immediately before going to the Lost Hills I had been employed in the Midway field. I had never been in the Lost Hills prior to May, 1911. When I arrived at the Lost Hills I believe the Universal people had taken charge of these lands. I didn't see any of Martin and Dudley's men, employees, when I got there that I know of.

There were other improvements on the NW.  $\frac{1}{4}$  of Section 30 besides the rig which I have mentioned. There was a good sized boarding-house, and a barn, and quite a number of sleeping tents. I can't say whether the boarding-house and barn had been con-

(Testimony of George A. Coffey.)

structed by the Universal, or was there when they took charge.

Q. Were there any improvements on either of these other four quarter-sections concerning which you have testified except the drilling rigs and wells which you have mentioned, in the way of houses and barns and shops, or anything of that kind?

A. There is a house on the SW.  $\frac{1}{4}$  of 32, house that Harry Covey lived in.

Q. Any others on any of the other quarters, any of these five quarters, concerning which you have been questioned?      A. Not that I can recollect.

The WITNESS.—(Continuing.) These buildings and tents and houses on the NW.  $\frac{1}{4}$  of Section 30 were used by the men who were engaged in the development of those lands.

That other house that I mentioned on the SW.  $\frac{1}{4}$  of 32 was occupied by Harry Covey, who was a driller on No. 1 on 32; and [610] Mrs. Covey ran a boarding-house and was boarding the other men who were working on this same well, and another drilling crew. They were all employees of the Universal Oil Company.

Q. Now you say you put the tubing in that water well on the SE.  $\frac{1}{4}$  of Section 30. Did you put that tubing in with a portable rig which you found there when you went there?      A. Yes, sir.

The WITNESS.—(Continuing.) That rig was in working order when I went there for that kind of work. I don't remember how much tubing I put in. My recollection is, though, that it was in the neigh-



(Testimony of George A. Coffey.)

borhood of 300 feet. I didn't strike the bottom of the well. I didn't plumb the well. This rig that was there was strong enough to handle that tubing all right. The water that was pumped from the well that I put the tubing in was used for drilling purposes.

There were no other water wells on any of those lands except this on the SE.  $\frac{1}{4}$  of 30 at that time, that I know of. With the exception of the water which was taken from this well on the SE.  $\frac{1}{4}$  of 30, our water for drilling purposes was hauled, but just where from, I don't know. The water from the SE.  $\frac{1}{4}$  of 30 wasn't good at all for boiler use.

Q. How often did you have to clean your boilers and retube them where you used that water?

A. Why, I think we used to clean the boilers about every, at least every week.

Q. How long did it take to clean a boiler?

A. Well, we used to shut down, I believe we would shut down in the evening, either in the evening or at midnight, to let the boiler cool off; and then clean it next morning, and we would generally fire up along about noon.

The WITNESS.—(Continuing.) I don't suppose they clean the boilers with the water we use now once in six months. [611]

Q. Well, did you have to retube your boilers often while you were using that water from the Southeast of 30?

A. They had a good deal of trouble with the boil-

(Testimony of George A. Coffey.)

ers, but we didn't have any trouble on the well I was working on.

The WITNESS.—(Continuing.) I guess Wasco was the nearest railroad shipping point from the Lost Hills when I first went there, if Wasco is closer than McKittrick.

I had occasion to go over the road between Lost Hills and Wasco at that time. For teaming, it was pretty fairly rough, I would say. I wouldn't consider it a very good road for teaming.

Q. Well, when you got out there in May, 1911, there was a good deal of activity on these lands, wasn't there?

A. The Universal Oil Company was rushing construction of derricks and rigs and starting development as fast as they could.

The WITNESS.—(Continuing.) That active development work continued on all of these quarter-sections from that time on until they were developed.

I don't know the approximate present production from these wells, from these five quarter-sections. I can't say whether it is very large or not. I don't know anything about the production, except, just taking it as a whole, to give a rough kind of guess on that.

Q. Could you take that map and give me the approximate number of producing wells on the NW.  $\frac{1}{4}$  of Section 30 now? Well, give it to me from memory if you can.

A. In the NW.  $\frac{1}{4}$  of 30. I think there are three.

Q. Three? A. Yes, sir.

(Testimony of George A. Coffey.)

The WITNESS.—(Continuing.) I don't believe there are any on the SE.  $\frac{1}{4}$  of Section 30. I don't know just exactly where [612] the line goes through there. Oil has been discovered on the SE.  $\frac{1}{4}$  of Section 30.

Q. But there is no production you think?

A. Yes, there is production on the Southeast. I was thinking of the SW.  $\frac{1}{4}$  of Section 30.

The WITNESS.—(Continuing.) I think the Universal has five producing wells.

Q. Now, on the NW.  $\frac{1}{4}$  of 30, how many producing wells are there?

Mr. MURPHY.—You are referring now to the present time, are you?

Mr. PERKINS.—Yes, to the present time, and I am expecting you to give approximate answers only. I realize that you may not know the exact number.

A. It is pretty hard for me to answer that last question because I don't know where the center of the section is. I know all of the wells.

Q. Well, could you give it to me better by telling me how many wells there are on the west half and the NE.  $\frac{1}{4}$  of Section 32 altogether?

A. Well, if I could get an idea of where, of what wells are closer to the center of the section.

Mr. HAMEL.—Universal 3 and 4 are right below the center here (showing map to witness).

A. There must be in the neighborhood of twenty wells on those three quarter-sections, or the three quarter-sections.

(Testimony of George A. Coffey.)

Redirect Examination.

(By Mr. MURPHY.)

Q. Referring again to the water well on the SE.  $\frac{1}{4}$  of 30, was there any oil on the water when you pumped it?

A. No, sir, not that I remember of seeing. [613]

Mr. HALL.—I now offer to read in evidence certified copies of the deposition of W. L. McLaine and H. E. Covey, taken in the Land Office in the same proceeding. Mr. McLaine was called as a witness for the contestees, and Covey was called for the Government.

(Thereupon Mr. Hall proceeds with the reading of the said depositions, which are as follows:) [614]

**Deposition of W. L. McLaine, for the Government.**

W. L. McLAINE, called as a witness on behalf of the United States, and being first duly sworn testified as follows:

Direct Examination.

(By Mr. MURPHY.)

The WITNESS.—My business is superintendent of the Lost Hills Development Company at the present time. I live at Lost Hills, California.

I studied engineering, but I did not get a degree, I never finished it. I am not a well-driller. I have been working for the Lost Hills Development Company since a year ago last July. Prior to that time I was Superintendent of the Universal Oil Company from May, 1911 to April, 1914. During that

(Deposition of W. L. McLaine.)

time I was Superintendent of their property. I had the purchasing of materials and the general direction of the work of drilling the wells, and the hiring of the men.

At that time the property of the Universal Oil Company, so far as I knew, consisted of Section 18, township 26 south, range 21 east; the west half and the southeast quarter of Section 30, all of Section 32, with the exception of, I think it was eighty acres that was leased to Mr. Prestage. Section 30 and 32 were in township 26 south, range 21 east. I became familiar with the corners of the sections as they existed at that time, almost immediately after my taking charge.

Q. Did you also become familiar with the improvements which were on these sections at the time you arrived in Lost Hills in May, 1911?

A. I became familiar with the improvements above the ground by merely seeing them there, I didn't make any special effort to place them on any particular quarters.

The WITNESS.—(Continuing.) In connection with my work [615] as superintendent of the operations of the Universal Oil Company on these lands, I became familiar with the improvements in the way of oil development, machinery which stood on the land at that time. At the time of my arrival in the Lost Hills, in May, 1911, there was a portable drilling rig on well known as No. One on Section 30, in the northeast corner of the northwest quarter, and a portable drilling rig near the center of the



(Deposition of W. L. McLaine.)

quarter. The well on the northeast corner of the quarter was producing at that time. That was known as the Lake Shore No. One or discovery well, Lost Hills. I don't know whether the other well was producing or not, I didn't know at that time. I have since found out that it was not drilled. The machinery that was standing there was hauled away by Martin and Dudley, either the latter part of 1911, or during the first month of 1912. I don't believe that the well was ever drilled at all. It was never drilled by me or the Universal Oil Company after I took charge.

At the time I took charge of this property in May, 1911, there was an old portable rig in the vicinity in the southeast corner of the southeast quarter of Section 30, and a hole had been drilled, and the casing was still in the hole, but as to the depth of it, I could not say. This well was not producing at this time; it was temporarily abandoned. It had never been drilled to oil that I know of. There were no signs of it ever having produced any oil. I had the rig which stood over this hole braced up and we used it to pump the well shortly afterwards. We pumped water. It was used afterwards as a water well. After I assumed charge that well was never drilled to oil. It never produced oil during the time I was superintendent. If that well had been drilled to oil prior to the time I took charge, I think there would have been some evidence of oil about the rig. I don't remember any other [616] rigs or wells on the SE.  $\frac{1}{4}$  of Section 30 at that time.

(Deposition of W. L. McLaine.)

Q. We will take up the NW.  $\frac{1}{4}$  of Section 32, township 26 south, range 21 east, M. D. M. I will ask you what if any improvement in the way of drilling machinery or equipment was standing on this quarter-section in May, 1911 at the time you took charge of the Universal Oil Company's interest there?

A. Well, there was at the time I took charge of the property a portable rig standing in the neighborhood of the center of the NW.  $\frac{1}{4}$  of Section 32, township 26 south, range 21 east.

The WITNESS.—(Continuing.) There was no evidence of the discovery of any oil having been made at that time. The discovery of the oil in the well was not made after I took charge. The equipment of that well was hauled away by Martin and Dudley, and the works were abandoned. It was the well that was known as the "Greasy Jim." I don't remember of any other derricks or mining equipment in this quarter-section at that time.

At the time I assumed charge in May, 1911, there was a part of an old derrick on the southwest quarter of Section 32, and a boiler, and I think there was a shed, and evidence of drilling, but it had been abandoned when I arrived. There was no evidence about this hole or well which would indicate that oil had been discovered there that you could notice. I believe the tools and part of the rig which was there at the time I arrived, were hauled away by Martin and Dudley; the boiler remained there for two or three years, I don't know what became of

(Deposition of W. L. McLaine.)

that. I don't know what the depth of the hole was. This well was never completed by the Universal Oil Company; they did no work on it whatever. There was no work being done on this quarter-section at the time I arrived. [617] There were no other drilling rigs or derricks on this quarter-section at the time, that I remember of.

At the time I took charge of the Universal Oil Company's interest in May, 1911, there was a portable drilling rig standing over a well in the southwest corner of the NW.  $\frac{1}{4}$  of Section 32, in the operation of drilling. H. E. Covey was the driller in charge. When I came down he was drilling for the Universal Oil Company. At that time I believe that the hole was in the neighborhood of six or seven hundred feet deep. The oil sands had not been reached at that time. I don't think that any discovery had been made in that well at that time. I think it was about two weeks after my arrival that the well came in. That well was a gusher from the start. By gusher, I mean an oil-gusher.

There were other drilling operations going on on the NE.  $\frac{1}{4}$  of Section 32 at that time. There was a well-drilling in the SE.  $\frac{1}{4}$  of the NE.  $\frac{1}{4}$  of Section 32, known as the Prestage well. Mr. Prestage himself was drilling that. He had not made a discovery at that time. He was about five hundred feet down, I believe. I think he struck oil about eight hundred and fifty feet. Mr. Prestage struck oil, I should say, in a couple of months after I arrived, but on account of the well not becoming a

(Deposition of W. L. McLaine.)

gusher as No. One had, he kept on going deeper and never finished the well for several months after that. There were no other drilling operations being carried on on the NE.  $\frac{1}{4}$  of Section 32 at that time, that I know of. There were no other rigs or drilling equipment standing on this quarter-section at that time, none of which I remember.

There was one well on this property, including the NW.  $\frac{1}{4}$  of Section 30 and the SE.  $\frac{1}{4}$  of Section 30, the W.  $\frac{1}{2}$  of Section 32, and the NE.  $\frac{1}{4}$  of Section 32, producing oil at that time, the time of my arrival on this property in May, 1911. That was in the northeast [618] corner of the NW.  $\frac{1}{4}$  of Section 30. No discoveries of oil, of which I know, had been made on any of these quarter-sections other than the NW.  $\frac{1}{4}$  of section 30 at that time.

After I took charge of this property as superintendent of the Universal Oil Company, in the way of establishing drilling operations we ordered a great many rigs immediately, and placed them on the property. As well as I can remember the first rig was placed on the northwest corner of the NW.  $\frac{1}{4}$  of Section 32, about a hundred and fifty feet from the lines. That was Well No. Two on Section 32. Well No. One was the well that Mr. Covey was working on, and it afterwards became known as Universal Well No. One on Section 32. About that same time material arrived for Well No. Two on Section 30, which was placed on the northwest corner of the SE.  $\frac{1}{4}$  of Section 30. And Well No. Three was

(Deposition of W. L. McLaine.)

placed nearly in the center of the SW.  $\frac{1}{4}$  of Section 30.

A rig was placed in the northeast corner of the SE.  $\frac{1}{4}$  of Section 30, and one about three hundred feet south of the discovery well in the northeast corner of the NW.  $\frac{1}{4}$  of section 30; those were all ordered and placed there approximately at the same time as near as we could get them there. These rigs which I have enumerated were placed on the NW.  $\frac{1}{4}$  and the SE.  $\frac{1}{4}$  of Section 30 just as quickly as we could get the material on hand, and drilling operations were commenced immediately.

I can't say exactly without looking at the records, how long before discoveries were made in these wells but we continued work right up until discovery was made in every well. They became producers all but Well No. Two, in the northwest corner of the SE.  $\frac{1}{4}$  of Section 30. We made a discovery of oil in this sand, but it was not sufficient. The depth of the oil sand varied, I should imagine twenty-five feet would be an average depth. The oil sands were [619] encountered at the depth of five hundred and fifty feet in well No. 5 on Section 30, and I believe between seven and eight hundred feet in well No. 4, I am not sure; that might be a little deep for that. No. 4 was finished inside of two months, and well No. 5 we had a great deal of trouble with on account of water, and we worked on and off on that well for almost a year.

Q. What work, Mr. McLaine, did you do on the west half of Section thirty-two after your arrival.



(Deposition of W. L. McLaine.)

A. Well, I have already mentioned that well No. two on the northwest corner of the NW.  $\frac{1}{4}$  which was the first well that we started drilling on on that section, and then we erected on what were afterwards known as well No. Three and Four, well No. Three being located at the northeast corner of the SW.  $\frac{1}{4}$ ; well No. Four being located on the northwest corner of the SE.  $\frac{1}{4}$ . And upon the completion of all three of these rigs, drilling was immediately started.

The WITNESS.—(Continuing.) Discoveries of oil were made in all three of these wells, but water troubles prevented the company from ever finishing well No. Two. The others afterwards became producers of oil, but No. Three was afterwards abandoned and cemented on account of water troubles. Well No. Three was a well which was started in the northeast corner of the SW.  $\frac{1}{4}$ . That was the first well which was drilled to oil in that quarter-section so far as I know.

Q. You say it produced oil for a while, and was afterwards abandoned?

A. Yes, it was a producer and on our producing list for over a year.

The WITNESS.—(Continuing.) The well which Mr. Covey was drilling in the NE.  $\frac{1}{4}$  of Section 32 was the well which afterwards [620] became known as the Universal Well No. One. Mr. Covey worked what is known in the oil fields as “daylights,” and I couldn’t say how many feet a day he made because he had sand troubles troubling him, and his

(Deposition of W. L. McLaine.)

casing troubled, as it always does when working the "daylights."

Q. How much progress can a drill ordinarily make on the property during the day?

A. Well, I believe a well could be drilled on that property at this time through oil bearing sands, in about a week or ten days.

The WITNESS.—(Continuing.) That is assuming, of course, there is no trouble, that no trouble is encountered. That is at the present time.

Q. About what speed was attained at the time you took charge in May, 1911?

A. It would take us from one month to two months for a well.

Cross-examination.

(By Mr. PERKINS.)

The WITNESS.—I do not know how long before I went out there in May, 1911, that the Universal Oil Company acquired this property in controversy. It was a comparatively short time.

Outside of Mr. Covey and Mr. Prestage, I don't think there was anyone operating on the land when I got out there. Mr. Covey was operating for the Universal Oil Company when I got there.

Most of these lands were acquired by the Universal Oil Company from Martin and Dudley, I believe. Martin and Dudley had put the improvement on there, which I described as being there when [621] I got there. As soon as I went out there to take charge, I tried to get a standard drilling rig on each of these quarter-sections as soon as I could, and I

(Deposition of W. L. McLaine.)

did get one on each quarter, and prosecuted work on these until I made a discovery of oil on each quarter.

After these discoveries were made a large amount of further development work was done on these quarters. There was over a half a million dollars spent on those five quarter-sections during the time I was there by the Universal Oil Company, not only in development but in other improvements which tended to assist in the development or production.

There was development work done since I resigned in 1914, since I left the Universal Oil Company. There has been further development work done.

Q. You were not familiar with the territory until you went out there in May, 1911?

A. I had been in the Lost Hills before that.

The WITNESS.—(Continuing.) I had made an examination so as to testify as to the particulars before that time. I was there in October, 1910. In 1910 I saw a rig in the northeast corner of the NW.  $\frac{1}{4}$  of Section 30, township 26 south, range 21 east, producing oil. That was known as the Lakeshore No. One or the Discovery Well. Martin and Dudley were operating that well at that time. I saw a great many other rigs on that land at that time. I could not say whether they were on any of these quarter-sections in controversy here as I was unfamiliar with the land, and did not know the corners. There were a great many rigs on top of the ridge, I couldn't say as to the location.

These lands are in the neighborhood of the top of

(Deposition of W. L. McLaine.)

the ridge, the ridge passes through all of these lands.

These rigs were portable in most every case.  
[622]

Q. There seemed to be considerable activity about most of the rigs?

A. On some of them there were.

The WITNESS.—(Continuing.) I did not learn who was doing the operating of the rigs, or who had put the rigs on these lands.

In October, 1910, I was on these lands, or that vicinity, almost one whole day. I do not remember of finding any pits or wells, such as were usually dug under a derrick or over which to place a derrick, when I went out there in May, 1911, except in the vicinity of the ridge that I have already described.

When I first began operations there, it took me two months, possibly more than that, to finish a well on an average. I was working with the standard tools.

It would take a very much longer time to finish a well with those prospecting rigs, which I have called portable rigs, which were first put in the fields under the conditions which existed before the formations were known.

Q. And it was very much more expensive in the early days, the pioneer days, than it was even when you first went there to sink the wells?

A. Yes, sir; I think so.

The WITNESS.—(Continuing.) It was the SE.  $\frac{1}{4}$  of Section 30 where we braced up an old rig for the purpose of pumping water. That water which we

(Deposition of W. L. McLaine.)

pumped from that well was used to run our boilers and drilling operations. It was used in development operations, steam purposes, and for watering the stock.

The Universal Oil Company finally acquired the lease which Prestage had on the eighty acres in the NE.  $\frac{1}{4}$  of Section 32. At the time that the Universal Oil Company took that lease Prestage had made a discovery on it. He first had a portable rig, but [623] afterwards he put in a standard rig.

Wasco was the nearest shipping point from which we hauled our rig timber and other supplies for this land. That was twenty-six miles.

Q. What was the condition of the roads?

A. You could hardly call them roads, they were very, very poor.

The WITNESS.—(Continuing.) Hauling operations were extremely difficult and tedious.

I am not in any way connected with the Universal Oil Company at Lost Hills.

Our domestic water was hauled fourteen miles when I first went to this land in controversy.

Q. What were the facilities of communication by the way of telephone and telegraph?

A. We had nothing closer than Wasco.

The WITNESS.—(Continuing.) This water well from which we pumped was not suitable for domestic purposes. That was used for stock and drilling purposes only.



(Deposition of W. L. McLaine.)

Redirect Examination.

(By Mr. MURPHY.)

The WITNESS.—I mean by domestic, water used for drinking and for cooking. There was only enough water for one well for drilling purposes at the time I took charge, on the ground. We had to haul the drilling water and our other water about five miles from what is called a slough.

Q. Wasn't there water on Section 6 and Section 22 of this same township at that time?

A. No, we hauled water from Section 28. [624]

Q. Was there a water well there? A. Yes.

Q. Do you recall whether or not there was a water well on Section twenty-two at that time?

A. Possibly there was, but we never hauled any water from there, Section 28 was nearer. The well on Section 6 was up there several miles from us; we never got any water from there.

The WITNESS.—(Continuing.) I don't remember exactly how long we hauled water after I arrived, but it was two or three months before we had a pipeline from the property to the slough, a distance of five or six miles. Then we pumped our water from the slough.

Q. A large amount of water could have been obtained from the land itself by drilling?

A. It could have been, but it was not suitable for boiler purposes. In using that water I had to maintain a boilermaker to keep the boilers in repair.

[625]

**Deposition of H. E. Covey, for the Plaintiff.**

H. E. COVEY, called as a witness on behalf of the plaintiff, and being first duly sworn, testified as follows:

Direct Examination.

(By Mr. MURPHY.)

The WITNESS.—I am an oil driller. That is my present occupation. I started in oil drilling about twenty years ago in Neodosha, Kansas.

Q. How long have you been drilling oil wells in California?

A. I came here six years ago, it will be six years in June.

The WITNESS.—(Continuing.) I started in to drill in the Kern River Oil Fields. I was there about four months, something like that.

From there I went to Lost Hills. I have been there practically ever since; I have never worked any place else than there since I went there. I was gone east forty days on a visit, but I haven't been away from there two months all told.

My postoffice address is Lost Hills. I will be forty-eight years old in October. I am employed at the present time by the Lost Hills Development Company. That is the same company for whom Mr. McLaine is superintendent.

Q. What time did you arrive in the Lost Hills in 1910?

A. Well, I am not sure, it was the fourth of October, I couldn't be positive of that; I think it was the fourth; I kept no date of it.

(Deposition of H. E. Covey.)

Q. Your best recollection of it, is that it was about the fourth of October, 1910?

A. I think it was.

The WITNESS.—(Continuing.) I started working for Maxwell [626] and King, I suppose at that time. It was hard to tell who you were working for out there, but that was the supposition; I was sent out there by King. They had picked up these water rigs all over the country, and the Associated was shut down there, and a friend of mine got a hold of King, and he sent for me, and he asked me if I could run a star drilling rig, and I told him I could, and he said Mr. Maxwell would put me to work out there, and I went out there.

I started in working on Section 22, Township 26 South, Range 21 East, on the NE.  $\frac{1}{4}$ . I worked there some four or five days, I should judge. I was there longer than that, too. I rigged up there and drilled down to water—it must have been ten or twelve days.

I was doing tool-dressing, in particular. I was supposed to be a driller, but when they came to pay me, they paid me with tool-dresser's wages. I was working with the drill alright, but they just "snided" me out of driller's wages when they came to pay me off.

I think it was one hundred and twenty-five feet to water; something like that. There was not much water there. The surface water doesn't amount to much. It was a light supply.

(Deposition of H. E. Covey.)

Q. After working on Section 22 for ten or twelve days where did you go?

A. Maxwell and King had a water well near McKittrick, on a ranch there, and they were starting in on it, and I went out with them and helped to tear the machine down, and started to the Lost Hills with it, and got out in the country a ways, and there were some fellows who met us and told us they didn't want the machinery brought on there, not to take it out there. Then we brought the machinery in here and the next day went to Lost Hills, and went to work on Section 6, it is in the same township and range [627] as Section 22.

Q. Were you still working for Maxwell and King?

A. No, this change had taken place when we went to work on Section 6, we were working for Martin and Dudley.

The WITNESS.—(Continuing.) It is our understanding that Martin and Dudley bought out Maxwell and King. I don't know any of the particulars about that, that was a supposition.

I don't think I could state how long I worked on Section 6. I have an old time-book, I should have brought that with me. My recollection is very short. We moved over there and set up that rig, and drilled down to water, and it seems to me that water is a little shallow there, it seems to me only about eight feet to water. And then we camped around there. There was outfits on each quarter of Section 6, all baching there together, and I think that we put in

(Deposition of H. E. Covey.)

about fifteen days there, something like that, about three or four days as well as I remember. That would bring it in November.

Q. You say there were four drilling rigs on Section 6? A. Yes, one on each quarter.

The WITNESS.—(Continuing.) They were all Martin and Dudley rigs.

Q. Where did you go next after leaving Section 6?

A. That is when they let everybody off. When we left Section 6, they were paying standard wages, you know, and Martin and Dudley said that we can get post-hole diggers, or men that will work down here for \$2.50 or \$3.00 a day, and they let us drillers all off; and I came back here but I wasn't here but about three days. That is in Bakersfield; and Bob Purcell, he was here and he said, "Come on and go back out, they have got started up, [628] if you want to go back, get in with me," and I got in the car with him and went back.

The WITNESS.—(Continuing.) There were no men drilling on Section 6, they let a whole bunch go, made a clean sweep, to give them a chance to hire who they wanted, at the price they wanted to pay.

Q. You were only laid off about three days?

A. I think so, I wouldn't be positive. That is a long ways back, and I made no note of it.

The WITNESS.—(Continuing.) After I went back the first thing I did was to put flues in the boiler in the camp on Section 28. That was also a Martin and Dudley camp. That was the camp of Maxwell and King, and Martin and Dudley were



(Deposition of H. E. Covey.)

together there at the start, it was the main camp on Section 28. There is nothing there now.

Q. Were they doing any drilling on Section 28 at that time?

A. I think Marve Curry had a lease on forty acres in Section 28, I think it was about that time. I am pretty sure that he was working putting his well down.

The WITNESS.—(Continuing.) It was my understanding that that was independent of Martin and Dudley. Martin and Dudley were not doing any operating on Section 28 at that time.

I fixed some flues in boilers at Section 28. I think that took me about three days. Then I went to 18-1. That is I started working on what is known as No. One well on Section 18, down on the flat. That was Martin and Dudleys' operations.

Q. How long did you work on Section 18?

A. They had a drill-bit, and I went out there and drilled, but I wouldn't be sure just how that came out. It seems to me that [629] we went to 18-3, and started a rig on that. That was what I was supposed to be doing then, rigging up and patching around.

Q. How long did you work on Section 18?

A. I think we were there about eight or ten days, something like that.

Q. That was still in the fall of 1910?

A. Yes, sir.

Q. From that time up until, say the first of January, 1911, what were you doing?

(Deposition of H. E. Covey.)

A. About the next job I had was, I went to the old American rig on the southeast—I am half turned around in California, it is very annoying to you to get mixed up, I can never get straightened up.

Q. Was it Section 18? A. No, 32.

Q. The southwest quarter?

A. The southwest quarter, the Old American Rig, I went there, and I took the boiler over and put flues in it.

The WITNESS.—(Continuing.) That was the SW.  $\frac{1}{4}$  of Section 32. There was an old American rig standing there, a portable rig.

There had been some drilling done. I don't know how much, they told me how deep the hole was, but I never could find it that deep. I should judge the hole was about sixty feet, when I went there. There was no evidence whatever about the hole to show whether oil had been discovered.

Q. You say you fixed up that rig?

A. I put flues in the boiler.

The WITNESS.—(Continuing.) I worked there on that quarter, tried to clean up the hole, but I couldn't do anything with the old rig. I was working there ten or fifteen days. I got the hole down a little deeper, it seems to me we put the hole down to 120 feet. [630] Something over one hundred feet. I could not be positive about that. It must have been about that time that we started to move the Star rig out there.

Q. What became of the Old American rig on the SW.  $\frac{1}{4}$  of Section 32?

(Deposition of H. E. Covey.)

A. Well, they had some rigs—they had what they called a “Mogul” rig on Section 6 in the same township, that they wanted to get out of there. That land was under contest by the Deming Brothers. They went in together and he wouldn’t let them have them you know. They started in to change; they were going to leave a rig on each quarter, the Old American rig was a dead one, and they could do something with the Mogul. They pulled it up to the line and the boys stopped them.

Q. They abandoned the hole on the SW.  $\frac{1}{4}$  of Section 32?

A. That is why they left no rig on the SW.  $\frac{1}{4}$  of Section 32. When Mr. McLaine testified this morning, he said that there was no old rig on the SW.  $\frac{1}{4}$  of Section 32. That rig had been taken away from there shortly before he took charge. That is why it was not there.

The WITNESS.—(Continuing.) There were no other rigs on the SW.  $\frac{1}{4}$  of Section 32; that left the SW.  $\frac{1}{4}$  of Section 32 without anything on it.

About the time I finished work on that old American rig on the SW.  $\frac{1}{4}$  of Section 32, I started work on what was afterwards known as Number 1, on the NW.  $\frac{1}{4}$  of Section 32.

Q. When was that?

A. It was stated there in that old time-book if you had that and looked it over it would tell when we started to move the rig. If you will look at the statement in the affidavit, made from the old time-book. [631]

(Deposition of H. E. Covey.)

The WITNESS.—(Continuing.) I am referring now to the affidavit I made before Mr. Jensen, Mineral Inspector, we took those dates from the old time-book we had, at the time I made the affidavit on the 26th of January, 1911. That is the date we started to move, the old Star rig was on Section 22. We started to move that to the NE.  $\frac{1}{4}$  of Section 32.

Q. How long did it take?

A. That is another thing. So much of that stuff that all took time. They were still trying to hold Section 22, they had an old dead rig. When we started to take the rig from 22 over to Section 32, we took that old dead American we had pulled up, pulled the Star rig back, and pulled the old American over the hole on Section 22, and then established the Star rig over the hole in Section 32. We had to move the old American down there, got it down ready, and then pulled the Star away and pulled the American in, then we had the Star to move three miles.

The WITNESS.—(Continuing.) On January 26th, 1911, when we started to move the Star rig from Section 22 to Section 32, we found Flynn's machine standing on the NE.  $\frac{1}{4}$  of Section 32, torn down and ready to more. The man on the machine was running it. He was working for Martin and Dudley.

Work had been done on the NE.  $\frac{1}{4}$  of Section 32 before we moved the Star rig on, there was a hole 580 feet deep.

I first pulled his machine away, and pulled the

(Deposition of H. E. Covey.)

Star in and started setting up. They had not drilled down to oil at that time. It was 818 feet where we struck oil.

Q. How long then did you work with the Star rig on the NE.  $\frac{1}{4}$  of Section 32 before you struck oil?

A. We struck oil after the Universal bought it.

The WITNESS.—(Continuing.) I don't know when they bought [632] it, it was supposed to have been a couple of months before Mr. McLaine came down there. I can't remember when it was we struck oil in there. It will tell you on there. I am referring to the affidavit again, I think it was the 8th of May, 1911.

Q. Did you work continuously on that well from the 26th of January to the 8th of May, 1911?

A. No.

Q. Describe what you did during that time?

A. At one time I put in eight and a quarter, in what we called then the Lakeshore No. Two. It is the 18-1 now. The Universal afterwards called it the 18-1. I put in the 8 $\frac{1}{4}$  pipe, cleaned the hole out, and put the pipe down to the first sand, it seems to me it was 530 feet.

The WITNESS.—(Continuing.) We were out there about ten days, I should judge. That was just a little time before the Universal bought them out, sometime during the spring of 1911. During the time that we did this work on 18-1, we suspended operations on the well on the NE.  $\frac{1}{4}$  of Section 32. We did not do any other work on any other claims during the time that we were drilling on the NE.  $\frac{1}{4}$



(Deposition of H. E. Covey.)

of Section 32. 18-1 is the only one we worked on after we went to 1-32.

Q. Were you working continuously on No. 1-32 between January 26th and May 8th?

A. Well, we were there, yes.

Q. What were you doing?

A. There were days when we put in  $8\frac{1}{4}$  in 18-1 we were there.

The WITNESS.—(Continuing.) We were not drilling all that time. We were not doing much of anything most of the time. We kept steam up.

Q. Why were you not drilling during all of that time? [633]

A. We had no orders to make much time, supposed to be taking it pretty quiet.

Q. Why?

A. We didn't ask them any questions, of course.

Q. But you were not attempting to make any speed or any headway?

A. No, none whatever.

Q. (By Mr. PERKINS.) How long did that last? A. About three months.

(Mr. Murphy resumes examination.)

Q. When did you start in seriously to drill on 1-32 in the NE.  $\frac{1}{4}$  of Section 32?

A. Well, it was like this, as near as I can get it, they ran along there and got the Universal bunch on the string, and got every Tom, Dick and Harry to take a dollar's worth of stock that they could, and as soon as they found out that there was a chance to sell the whole thing, this stock looked good, and they

(Deposition of H. E. Covey.)

commenced to buy it up.

Q. Who commenced to buy it up?

A. Martin and Dudley, and of course they wanted it to look as blue as possible most of the time when they brought a bunch of fellows to come there. They didn't want to make any showing until they grabbed up the stock, then they were ready to go ahead.

Q. After they had bought the stock they were ready to go ahead and develop?

A. They wanted to move along, they didn't want to make any speed at all, different from what it was before Dudley came out and told me they had a bunch of these stockholders coming down, and for me to get up the next morning and put a plug in the well and if necessary to hide a part of the engine. We had the packing laid off at Bakersfield for repairs and he knew we had been shut [634] off. Ed Dudley said to take that to some place so as it would be impossible to run the boiler or make any showing. I did as I was instructed, put the plug in and hid the packing, and they went to the SE.  $\frac{1}{4}$  of Section 32 and fired that up, and somebody else fired up the engine on the "Greasy Jim."

The WITNESS.—(Continuing.) The "Greasy Jim" is on the NW.  $\frac{1}{4}$  of Section 32. The supposition was, they wanted to have everything showing that they were making lots of expense and getting no oil.

Q. Had these engines been fired up any time before?

(Deposition of H. E. Covey.)

A. Yes. The Greasy Jim hadn't; that is the first time I ever saw any life in it. When the stockholders came, Harry Whitmore got out. He was supposed to be a friend of Martin's. He said, "Well, Covey, how is everything?" He had quit, he wasn't there as bookkeeper any more. A bunch of them drove up and he was the only one that got out. He said, "How is everything, Covey?" I said, "All right." I supposed he was inside, and knew just what was going on, and he got in the car and went away, and I found out afterwards that he didn't know what was going on.

The WITNESS.—(Continuing.) We had not made a discovery of oil on the NE.  $\frac{1}{4}$  of Section 32 at that time. We were about 645 feet deep, I think. We were through the tar sand. You see you get a tar sand first that makes a little oil and a little gas; we went through there and that is when they shut down to get this bunch out. They were satisfied that there was a change for oil then; they had us shut down while they worked on these stockholders.

We received instructions from Martin and Dudley to shut down. Ed Dudley instructed me. He said, "As soon as you get this tar sand or any indications of oil whatever shut down and let it set there, and notify us." It was on St. Patrick's day that we [635] got a little dab of tar sand, and we notified them, and that is when they came out and told me to shut down, that they were going to bring out these stockholders.

The WITNESS.—(Continuing.) That was St.

(Deposition of H. E. Covey.)

Patrick's day, 1911. I was working for Martin and Dudley at that time.

Q. How long did you let it set after that time?

A. We didn't do anything for a number of days, but we kept the smoke going.

Q. When did you start in seriously to complete the well?

A. Well, it was some time after that, that they decided to go ahead. As I understand they had to show the Universal Company oil before the deal would go through. We got some more pipes and we went ahead. That was after the deal was made, as I understand it, but yet we were working under Martin and Dudley; in other words, nobody in the Universal bunch had come in to take charge and as I understand it, that was all that we were waiting for, just for Mr. McLaine to get there and take charge of it.

Q. You kept working along in that manner until Mr. McLaine arrived? A. Yes, sir.

Q. After he arrived, what instructions did he give you?

A. It was after that we were satisfied that the deal was going through. A lot of that dope I couldn't swear to; that is, I wouldn't want to. But I got it straight enough to know there is something to do. They knew the deal was going through. I suppose the Universal told them to keep this going, until they could get down there, because we got instructions about two months before that, that there would be no pay-day until the Universal took charge.

(Deposition of H. E. Covey.)

Q. After you got those instructions, how much drilling [636] would you do during a day?

A. Well, if it was good drilling we could make fifty feet a day, if you wanted to.

Q. You say you could make fifty feet a day if you tried? A. I did the first day.

The WITNESS.—(Continuing.) That was after we got instructions to take the plug out of the well and go ahead. We didn't drill fifty feet a day after that.

Q. How much did you drill?

A. That is another thing. They bought a lot of junk pipe, and started up and made some hole and put in some pipe, it was a different kind of pipe, and wouldn't screw together, and we had to come to Bakersfield to have some work done, and we lost several days that way before we got started.

Q. At the time Mr. McLaine arrived there in May, 1911, what kind of progress were you making with the drill? A. Knocking around.

Q. Not very much?

A. We had boiler trouble with the water, had to put in a flue and repair a boiler.

The WITNESS.—(Continuing.) After Mr. McLaine arrived we made better progress, we commenced to go ahead. It was not but a few days until we had a gusher out of it. Eight or ten days, I don't remember what the time was. That is what was known as well No. One on the NE.  $\frac{1}{4}$  of Section 32. That is the first well put down for oil on Section 32 to my knowledge.



(Deposition of H. E. Covey.)

The Prestage was another rig that was operating on the NE.  $\frac{1}{4}$  of Section 32 during that time. That well was started about the same time we moved the Star out there. He drilled down to oil. It must have been three months afterwards when he made discovery, after he started it. We got to the oil first. They had [637] a portable outfit you know. He got to oil after we did. It couldn't have been very long. I know they were terribly excited when we brought in our well, and they went right after it, it couldn't have been more than thirty days at the outside.

There were no other rigs on the NE.  $\frac{1}{4}$  of Section 32, during that time. There was a rig on the NW.  $\frac{1}{4}$  of Section 32 at that time, the Greasy Jim was still there. I never seen it work.

Q. Except the time you saw smoke down there?

A. Yes, the time that they fired the boilers.

Q. Any other rigs in the NW.  $\frac{1}{4}$  of Section 32 during that time, other than the Greasy Jim?

A. I saw that water well in the NW.  $\frac{1}{4}$ . Yes, sir; the one they used for a water well, it was on the NW.  $\frac{1}{4}$  of Section 32.

Q. (By Mr. HAMEL.) Was there anything done with that hole on the NW.  $\frac{1}{4}$  of Section 32, where the Greasy Jim was? A. Not that I know of.

Q. Maybe I can refresh your recollection. Mr. McLaine stated this morning that the water well in which he put down the tubing after he arrived, was in the SE.  $\frac{1}{4}$  of Section 30?

A. That would be there (indicating). That has

(Deposition of H. E. Covey.)

been all torn away, and other stuff built in there, it is on section 30, the water well was.

The WITNESS.—(Continuing). The water well was on the SE.  $\frac{1}{4}$  of Section 30. And the only drilling rig that I can recall being on the NW.  $\frac{1}{4}$  of Section 32 during that time, was the Greasy Jim.

There were no drilling operations on the SW.  $\frac{1}{4}$  of Section 32 during that time, or during the time I was drilling on the NE.  $\frac{1}{4}$  of Section 32. There was never a rig on the SW.  $\frac{1}{4}$ .

Q. Which quarter was it that the Old American rig was standing on? [638]

A. Yes, that is right; yes, it was on the SW.  $\frac{1}{4}$ .

Q. That is the rig that was moved to Section 22?

A. No, it was moved to Section 6.

Q. And the Mogul brought down from Section 6?

A. No, they got it down to change it, and they wouldn't let them—

The WITNESS.—(Continuing.) There was an old American rig on the SW.  $\frac{1}{4}$  of Section 32, and that was moved to Section 6.

Q. During the time that you were on the place?

A. 1-32.

Q. Was any rig left there or moved there in its place? A. No.

Q. Referring now to the SE.  $\frac{1}{4}$  of Section 30, were there any rigs on that quarter at the time that you were working on the NE.  $\frac{1}{4}$  of Section 32, other than the rig that was standing over the water well?

A. That is the only rig I ever saw.

Q. Was that rig active during the time you were

(Deposition of H. E. Covey.)

drilling on the NE.  $\frac{1}{4}$  of Section 32?

A. No, I passed by it at different times. And we went there and got a set of tool-wrenches, but there was nobody there.

Q. Was that rig fully equipped?

A. They had been drilling with it, because they had a hole started, but I never saw them drilling there.

The WITNESS.—(Continuing.) I couldn't say how deep that hole was, down to the water anyway. It must have been 250 feet. That is only a guess with me, I know they put tubing in it and pumped water.

Q. Were there any drilling operations going on on the NW.  $\frac{1}{4}$  of Section 30 between January and May, 1911? [639]

A. That has nothing to do with the Devil's Den.

Q. That one on the Northwest is the one on which the discovery well is?

A. I never saw any work going on there.

The WITNESS.—(Continuing.) The discovery well was operated there during that time. The discovery well was not pumping oil at the time that I arrived in the Lost Hills in October, 1910; it started up the next day after I got there, the first they had ever pumped there. They were using a little gas engine. They had made a discovery of oil, they had bailed on it. They had bailed out some, and let it run out to the sump hole. It looked like an oil well all right.

Q. During the time between January and May, 1911, when you were working on the NE.  $\frac{1}{4}$  of Sec-

(Deposition of H. E. Covey.)

tion 32, how many other rigs did Martin and Dudley have in operation?

A. Well, as near as I remember, the 18-1 was the only one that we were trying to do anything with.

Q. That is the only other one that you were trying to do any drilling with? A. Yes.

Q. Did they have any other drilling rig?

A. Yes, they had water well rigs, twenty-three or twenty-five of them, scattered around there in different tracts of land.

Q. On what sections?

A. Four on Section 6, two on Section 8, three on Section 18, two on Section 34, one on Section 22: that is the old Star. And three I think, on Section 28, one on 18-1.

Q. Was there any on Section 20?

A. No, they didn't have 20 at that time.

Q. Were all of these rigs equipped for drilling?  
[640]

A. They could have been rigged up so as to spud a hole down a ways. Some of them could.

Q. Did any of them have crews?

A. They did at one time. When I first went down there, there were plenty of men on them.

Q. How many men did they have?

A. Ten or twelve drillers.

Q. What became of them?

A. They were laid off when I got laid off.

Q. Did they bring any of them back, besides yourself?

A. Yes, I came back and Howard Chase came

(Deposition of H. E. Covey.)

back. They couldn't get rid of Walter Moran, he came back after a while.

Q. How many drillers did they have working during the time between January and May, 1911?

A. That was after I went to work.

Q. On Section 32?

A. They didn't have any outside of myself.

The WITNESS.—(Continuing.) They left the rigs standing on the various tracts, except 18-1, they ran a mud-skow, and when I went down there they had a man monkeying around there that did some chores for me. I wouldn't call these men they had employed competent drillers. I went over to splice a rope for them: any man that can't splice a rope is not much of a driller in my opinion, if he drills very much he has got to learn to splice a rope. I spliced a rope for them that time I tore the old rotary down on the NW.  $\frac{1}{4}$  of Section 30, and moved it to Section 18. After I got the rig on 18-1, I went and spliced the rope for them. They put Moran and Chase on there to go ahead with the hole, but they never went very far. But these fellows they had to keep or do something with them. They worked on that discovery hole when they said, "You keep [641] still until we get a bunch of this land, we will make it right with you." That is according to their own story.

During the time we were operating on the NE.  $\frac{1}{4}$  of Section 32 we used oil for fuel. We got it at the old discovery well on the NW.  $\frac{1}{4}$  of Section 30. We hauled our water from Section 28 in the same town-



(Deposition of H. E. Covey.)

ship. They had a water well there, you know, and we put a pump in it. We hauled drinking water from the Lone Tree, about twelve miles.

To the best of my knowledge, that well which we drilled on the NE.  $\frac{1}{4}$  of Section 32, now known as the Universal No. One on Section 32, was the discovery well on Section 32.

Q. (By Mr. HAMEL.) How many boilers did Martin and Dudley have in the Lost Hills in their operations?

A. Most of the old rigs had boilers attached.

The WITNESS.—(Continuing). They didn't have boilers to all of them. They were boilers that could have been utilized, I suppose most of them. Two that I put flues in were old boilers that had to be fixed up; we afterwards used the rig we were just speaking of, I don't think it ever had a boiler to it. That was the rig on the SW.  $\frac{1}{4}$  of Section 30.

Q. Did you ever see a boiler on the SE.  $\frac{1}{4}$  of Section 30? A. That is a water well.

Q. Yes.

A. I never seen any boiler there until after the Universal took charge of it.

Q. How deep was that well on the NW.  $\frac{1}{4}$  of Section 32 where the Greasy Jim was?

A. I don't know, it was down, I couldn't say how deep it was.

Q. That is right close to the Universal 32. [642]

A. On 32? Well, our boiler came right close to that, and I noticed the hole when we were setting the

(Deposition of H. E. Covey.)

boiler, but how deep it was, I don't know.

(Mr. Murphy resumes examination.)

The WITNESS.—(Continuing.) We continued to work on these claims after the Universal Oil Company took charge. I worked for the Universal three years immediately after the Universal took charge. None of these other wells, such as Greasy Jim on the NW.  $\frac{1}{4}$  of Section 32, or the hole on the SW.  $\frac{1}{4}$  of 32 over which the old American rig stood, were afterwards drilled by the Universal Oil Company during the time I worked for them. These wells were abandoned.

Q. How about the water well on the SE.  $\frac{1}{4}$  of Section 30?

A. That was—as soon as they saw that the well was not a success for boilers, they got a pipe-line to the slough—they just used the water temporarily; as soon as they got the line laid and water started, they pulled the tubing out, and that was the last of it.

The WITNESS.—(Continuing.) I do not know when discovery of oil was made on the SE.  $\frac{1}{4}$  of Section 30 by the Universal Oil Company. They made a discovery there after they started operations, after they took charge.

Discovery of oil was made on the NW.  $\frac{1}{4}$  of Section 32 after the Universal took charge. I forget what well it was that they drilled on that section first, I think it was well No. 7, I am not positive.

There was also a discovery of oil made on the SW.  $\frac{1}{4}$  of Section 32 after the Universal took charge. I think four was the first well brought in

(Deposition of H. E. Covey.)

there, or was it three—yes, that is right, four was the next one. No, three was the discovery well on the [643] SW.  $\frac{1}{4}$  of Section 32.

Cross-examination.

(By Mr. PERKINS.)

The WITNESS.—When I went out there about the 4th of October, 1910, Martin and Dudley must have had twenty-five men at work. I don't know exactly how many they had, they had gun-men all over that country. There must have been fifteen or sixteen working on rigs and men getting ready for development work and engaged in development work.

Q. You only stayed a few days and everybody got laid off and you came back to Bakersfield?

A. Yes, that was after we had been out on #6.

The WITNESS.—(Continuing.) And then I went out there again, it must have been right the last of October, and went to work for them the second time. I have been working in the Lost Hills ever since. From the time I got back out there in the last of October, I am pretty sure I worked continuously for Martin and Dudley and their associates under the name of Universal Oil Company. I worked right along, except such times as I came in to see the family. I can't say how many other men they had at work at any other time, either in development work or in keeping development work going in the Lost Hills directly or indirectly. I don't think they had as many as fifteen or twenty men; I think ten or twelve would cover the whole thing.

(Deposition of H. E. Covey.)

Q. And they had that many men practically all of the time until the Universal Oil Company took the land over.

A. No, as I said, about the time I started to move the old Star off of Section 22, they cleaned up another bunch, and all that time, there were but two men on 18-1. A teamster and a cook. [644] On Section 28 they had a camp there, a cook on Section 30. They had a man that pumped the old Discovery well and bached there. When we were working that way we ate there. They had about ten men at that time, including cooks and teamsters.

The WITNESS.—(Continuing.) They were regularly and continuously employed until Mr. McLaine came out there in May, 1911.

Q. The day that you got the instructions to go and loaf on this well on the NE.  $\frac{1}{4}$  of Section 32, you had gone through the tar sand? A. Yes, sir.

The WITNESS.—(Continuing.) As I remember, there was about four feet of tar sand. It carried very little oil and a little gas. It didn't carry enough oil so to get any oil out of it. It wouldn't amount to a "row of beans" so far as oil is concerned.

Q. Was there enough oil there so as to get some oil out of the well?

A. Well, that tar sand is like taking a handful of sand and pouring oil in it, you can't get any oil out of it.

The WITNESS.—(Continuing.) It carried a little gas; enough to light at the casing head, occa-

(Deposition of H. E. Covey.)

sionally. That is, I never tried to light it.

Q. Is this gas found in this tar sand below oil or above oil?

A. That was the first indication that tar sand was.

Q. How about the wells carrying much gas?

A. Yes, sometimes they did. That one on Section 32 flowed for days.

Q. As to the motives which prompted Martin and Dudley to slack up on their work and mark time, you know nothing about that except hearsay and your own conclusions? [645]

A. No, I couldn't swear that is what they did, but it looked as though something was crooked. That is what happened, and a number of them gave their stock away, so there must have been something to it.

Q. Martin and Dudley never told you that?

A. No.

Mr. PERKINS.—I will have to ask to strike out the witness' testimony on direct examination as to the motive which prompted Martin and Dudley to slack up on their work upon the grounds that it is hearsay. I don't know that it will hurt our case any, but I don't care to have that hearsay testimony in the record.

Q. Who drove that water well on the SE.  $\frac{1}{4}$  of Section 30? A. It was the SW.  $\frac{1}{4}$  of Section 30.

Q. No, it was the SE.  $\frac{1}{4}$  of Section 30. Mr. McLaine testified this morning that it was the SE.  $\frac{1}{4}$ .

A. I don't know.

Q. Was that well there when you first went to the fields?



(Deposition of H. E. Covey.)

A. I think they were working on it, I was working on the other side.

The WITNESS.—(Continuing.) I believe it was drilled by Martin and Dudley rigs. I don't think Maxwell and King got over that far.

Q. Even if they were, they were working for Martin and Dudley?

A. No, Maxwell and King grabbed some of that land, Martin and Dudley had some of it, and they were in together, and somehow or other, Maxwell and King stepped down and out, and Martin and Dudley took over their holdings.

The WITNESS.—(Continuing.) I was never over to the Lost Hills before October, 1910; that was my first trip. When I got out there in October, 1910, there was quite a lot of excitement.

Q. And it continued to be pretty lively until the Universal Oil Company bought that property, didn't it?

A. Not near so much so after they bought it. It took [646] a big slump. After the first time I got laid off and went back it was not so lively. It settled down to a more business-like basis.

Redirect Examination.

(By Mr. MURPHY.)

Q. Regardless of the motives of Martin and Dudley do you know of your own knowledge that they did mark time for awhile?

A. Sure, they would not keep me and pay me for sitting around there and doing nothing if there had not been something in it.

(Deposition of H. E. Covey.)

The WITNESS.—(Continuing.) I had instructions to mark time from Mr. Dudley, not from Mr. Martin. Martin didn't have very much to do so far as giving orders was concerned. I had instructions from Mr. Dudley. He told me to "tinker around in case someone comes around, in case you don't know who they are, to be busy at something." That lasted about three months until they brought Mr. McLaine in.

Q. How long were you loafing?

A. We moved there on the 26th of January, and it was the 8th of May when we brought the well in.

The WITNESS.—(Continuing.) We were loafing a good proportion of the time. And then we went ahead and made a hole. They patched boilers. So we had no chance to work part of the time, even after we could have gone ahead.

From January until April, there was not very much being done, there was not very much to do on any place there. Things were kind of on the drag.

Martin and Dudley had different kinds of rigs out there. Keystones, Stars, Waterloo, American, Mogul. The Mogul was a home-made rig, made in Hanford, and Flynn's rig was a home-made rig. They were all portable rigs. They were not rigs that were capable [647] of drilling oil wells. The Star was about the only rig capable of drilling an oil well. In fact, Purcell said to me, "We will go ahead." He said, "What kind of rigs do you want to take out there?" I said, "that this Star rig is the only rig fit to take out there."

(Deposition of H. E. Covey.)

Purcell was superintendent for Martin and Dudley.

Q. It was your opinion at that time that the Star rig which you used to drill the well with on the NE.  $\frac{1}{4}$  of Section 32, was the only rig which Martin and Dudley had at that time which was capable of drilling a well down to oil?

A. They had one Keystone rig that was big enough to drill holes. But it was not capable of handling pipe. But the Star was equipped to handle pipe. That is why I say that the Star was the only rig that was capable of going after that oil even at 800 feet.

Q. How many Star rigs did they have?

A. One. [648]

San Francisco, California, Wednesday,

August 23d, 1916, 10 o'clock A. M.

(Mr. Hall completes the reading of the deposition of H. E. Covey.)

Mr. HALL.—I offer and read in evidence a certified copy of the deposition of L. E. Prestage, taken in the land office, and this deposition is offered in all three cases. This witness was a witness offered by the Government.

(Thereupon Mr. Hall reads said deposition, which is as follows:) [649]

### **Deposition of L. E. Prestage, for Government.**

L. E. PRESTAGE, a witness called in behalf of the United States, who being first duly sworn, testified as follows:

(Deposition of L. E. Prestage.)

Direct Examination.

(By Mr. MURPHY.)

The WITNESS.—I live at Plano; Portersville is my postoffice. I am a well-driller and farmer. I have lived at Portersville 22 years. I am 59 years old.

Q. How much experience have you had in oil-well drilling?

A. Well, I was in the Kern River Field when it first started and was there a short time, and I was in the Lost Hills about 2 years. Outside of that, I have been a water-well driller for 25 years.

The WITNESS.—(Continuing.) I first started drilling in the Lost Hills in September, 1910. I started to move on to the land the 13th of September. I drilled on the NE.  $\frac{1}{4}$  of Section 30 at that time. The work was done for the Devil's Den Consolidated. I finished up Christmas, 1910, finished the well.

Q. At the time that you arrived at the Lost Hills and started drilling on the NE.  $\frac{1}{4}$  of Section 30, township 26 south, range 21 east, did you have occasion to examine or cross the other quarter-section in Section 30 and 32 so as to become familiar with what work was going on on those sections at that time?

A. Yes, sir; I think I did.

Q. What, if any, work had been done, looking towards development of oil on the NW.  $\frac{1}{4}$  of Section 30 in September when you arrived at the Lost Hills?

A. I was informed that they had struck oil and afterwards found out that it was so. They had a

(Deposition of L. E. Prestage.)

well rig there and had it fenced in at the time I went there. But I bought oil shortly afterwards to run my rig with. [650]

The WITNESS.—(Continuing.) That was what was known as the Old Lake Shore Well No. 1, the discovery well. There were no drilling rigs on the NW.  $\frac{1}{4}$  of Section 30 at that time. There were no drilling rigs on the SE.  $\frac{1}{4}$  of Section 30 in September, 1910. I think there were no drilling rigs standing on the NW.  $\frac{1}{4}$  of Section 32 in September, 1910. There were no drilling rigs standing on the SW.  $\frac{1}{4}$  of Section 32, in September, 1910.

Q. Were there any drilling rigs standing on the NE.  $\frac{1}{4}$  of Section 32 in September, 1910?

A. That is where the first well was brought in, in Section 32?

Q. Yes, sir.

A. That was where the first gusher that Mr. Flynn and Covey drilled. No, they were not there in September.

Q. After completing the well for the Devil's Den Consolidated Company on the NE.  $\frac{1}{4}$  of Section 30, did you do any further drilling? A. Yes, sir.

Q. Where?

A. On section 32, on the NE.  $\frac{1}{4}$  of Section 32. I moved there in January, 1911.

The WITNESS.—(Continuing.) Drilling operations had commenced on the NE.  $\frac{1}{4}$  of Section 32 at the time I moved down there of January, 1911. Mr. Flynn had set up a rig and drilled some, or drilled down to some depth on that quarter-section, and they



(Deposition of L. E. Prestage.)

claimed that they had struck oil. At the time I moved there they claimed that they had a showing of oil; I did not know, I cannot swear to that, I heard that report. I think it was down between 400 and 500 feet, Mr. Flynn was, I think; and Mr. Covey went on and finished the well. I would think Mr. Flynn started drilling on the NE.  $\frac{1}{4}$  [651] of Section 32, the last of November or the first of December. It was in November or December, of 1910. He did not complete that well. That was afterwards completed by Mr. Covey. I could not give the date when he made the discovery of oil. I would think, approximately, in February or March of 1911. I made my discovery in May.

During the time between September, 1910 and May, 1911, while I was working on Sections 30 and 32, there were additional rigs placed on the NW.  $\frac{1}{4}$  of *Section* or the SE.  $\frac{1}{4}$  of Section 30. There was a standard rig put on the NE.  $\frac{1}{4}$  and I think also one on the SE. — while I was drilling there, at any rate. The one on the SE. might have been later than that, but I was still drilling on my well when that was placed there.

Q. That is the SE.  $\frac{1}{4}$  of Section 30?

A. No, I presume that is wrong. I can tell better about this case, perhaps, better than anybody else. There was a rig placed on the SE.  $\frac{1}{4}$  of Section 30. Because I used to go from the old discovery well right down there afterwards, backwards and forwards. They did not strike oil at any time that I was there.

(Deposition of L. E. Prestage.)

The WITNESS.—(Continuing.) I think Martin and Dudley put that there. I do not think this was the rig which afterwards developed a water well. There was no discovery there during the time I worked there that I know of.

I do not recall any additional rigs being put on the NW.  $\frac{1}{4}$  of Section 30 during that time. There was some rigs placed on the NW.  $\frac{1}{4}$  of Section 32 while I was drilling there. I think Martin and Dudley placed a rig there in the fall of 1910, placed it in the fall of 1910, say in November, and drilled down a short distance, maybe 200 feet by the looks of the mud, and then later on the Universal placed a rig on there while I was still in the field. [652] I do not know whether that was the rig which was known as "Greasy Jim."

Q. Was a discovery of oil made by that rig during the time that you were drilling there, on the NW.  $\frac{1}{4}$  of Section 32?

A. I do not think they had oil while I was there.

Q. What kind of a rig was that?

A. The second rig I speak of was a Standard rig, that is, the Universal rig. The one Universal put on was a standard rig.

Q. But I mean the first rig that was put on.

A. That was a gas engine rig, Southern California, walking-beam rig.

The WITNESS.—(Continuing.) That was the first thing that was put on on the NW.  $\frac{1}{4}$  of Section 32 after I arrived. That was a portable rig. It was made for water-well work. They operated that

(Deposition of L. E. Prestage.)

first rig on the NW.  $\frac{1}{4}$  of Section 32 a very short time. The drilling was not all done at once. It was drawn out over a period of time. Put in a day or half a day, then quit. I do not recall who the driller was on that rig, I can't say. I think they had several parties drilling.

During the period of September, 1910, and May, 1911, when I was drilling in the Lost Hills, there was a rig placed on the SW.  $\frac{1}{4}$  of Section 32. I think that Martin and Dudley placed that rig there. I think it was a portable star rig. That rig was placed there right after the first gusher well on the NE.  $\frac{1}{4}$  of Section 32. That was after Flynn started drilling on the NE.  $\frac{1}{4}$  of Section 32. I do not know what, if any work was done by that rig on the SW.  $\frac{1}{4}$  of Section 32. It was there a good, long while. I think it was inactive a part of the time.

I do not remember whether that rig was removed during the [653] time I was there. I do not know how much drilling they did. I do not think there was any discovery of oil made on that well during the time I was there.

Q. Go on—to refresh your recollection I will ask you, Mr. Prestage, if that rig was afterwards removed by Covey and some other to Section 6.

A. They moved a rig and I presume that that is the same one. I did not keep close watch of anything of that kind.

The WITNESS.—(Continuing.) I think Mr. Covey operated that rig, I am not sure about that, though. I would not be sure whether it was at the

(Deposition of L. E. Prestage.)

time he was drilling on the NE.  $\frac{1}{4}$  of Section 32 in the vicinity of where I was drilling, or just afterwards; it was about the same time oil was struck on the NE.  $\frac{1}{4}$  of Section 32, or just afterwards. And the time they moved down to start or started in drilling on the NE.  $\frac{1}{4}$  of Section 32, in January, 1911, Flynn had already started his well on that quarter section. He was working there when I arrived. I continued to work there a very short time, a few days.

Q. What was the character of his work? By that I mean, was he pushing the work, or crowding the work, or just dragging along?

A. I could not say as to that.

Q. After Mr. Covey superceded Flynn, what was the character of his work?

A. He seemed to work very well for a new field. You understand that there is lots of lost time for lack of having things in a new field like that. But I did not give that very much thought, or attention.

Q. Did Martin and Dudley have any other rigs on other land in that vicinity at the time that you arrived at the Lost Hills [654] in September, 1910?

A. There was a rig east of Section 32 about a mile, maybe a little more than a mile, I can't tell you the section, but it was about a mile east of where I drilled on Section 32. There was a rig there that belonged to Moran, I think, a Star drilling rig.

Q. Do you recall, whether during the fall of 1910 Martin and Dudley were carrying on drilling operations on Sections 28 and 18 of that same township?

(Deposition of L. E. Prestage.)

A. Yes, sir. They were operating on both sections after I went in sometimes.

The WITNESS.—(Continuing.) They were also operating on Section 6 of that same township.

Q. And you mentioned some work on Section 34, or rather, about a mile east of Section 32?

A. I think it was Section 34, I think that is right. Yes, that is right.

Q. Were they also operating on Section 22?

A. I do not remember.

Q. What was the character of their operations?

A. Well, they had well rigs set up and did some work on all of this first. On Section 34 they did quite a little work there. Seemed to work pretty steady. Some of the others, they just worked a few days and the rigs stood idle a good deal of the time. But, as I said before, it was hard to get supplies and things into this field.

Q. How many men did they have employed, approximately?

A. Oh, I do not know, perhaps 100.

Q. All of the time?

A. Quite a little time they had a lot of men.  
[655]

The WITNESS.—(Continuing.) I do not think they were all drillers. They were holding down locations; take some out with their tents and some Winchesters and put them on a piece of land to hold it, and trying to get a rig on it.

Q. Did the rigs remain on the lands after being placed there?



(Deposition of L. E. Prestage.)

A. Oh, there were a great many—they were a great many times moved and removed. You know there seems to be lots of jumping and one trying to get the location away from the other, like any other oil excitement or any other excitement.

The WITNESS.—(Continuing.) I was still working on the NE.  $\frac{1}{4}$  of Section 35 at the time Mr. McLaine arrived. He is the Superintendent of the Universal Oil Company. I think I was there nearly a year after he arrived. I noticed a difference in the manner in which the work was done after he arrived. They put on standard rigs and crowded the work all they could. Prior to that time it did not occur to me that the drilling operations were being crowded along. I would not think they were crowding. I thought the character of their operations was more development work than anything.

Cross-examination.

(By Mr. PERKINS.)

The WITNESS.—When I first went to the Lost Hills in September, 1910, I went over there to work for the Devil's Den Consolidated, on the NE.  $\frac{1}{4}$  of Section 30. I put a well down on that quarter and made a discovery. Then from there I went to the NE.  $\frac{1}{4}$  of Section 32. I had a lease of a portion of the NE.  $\frac{1}{4}$  of Section 32. I think I got that lease from the Lost Hills Mining Company. I have the lease at home. I had 80 acres in the NE.  $\frac{1}{4}$  of Section 32, the east 80. I afterwards disposed of that lease to the Universal [656] Oil Company. I believe it was in 1912 that I disposed of my lease.

(Deposition of L. E. Prestage.)

That was a lease that was held by the Prestage Oil Company.

Q. And before you made the discovery there did you have some hard luck and get your leg broken, something of that kind?     A. Yes, sir.

The WITNESS.—(Continuing.) Martin and Dudley were very active in the Lost Hills when I went over there in September, 1910. That was a time of great excitement in the Lost Hills. I think a great many people were trying hard to get land and locate over there.

Q. And the homesteaders were giving the oil men some trouble were they not, by filing homesteads on those lands?

A. The homesteaders—I do not know much about it only what I heard. But I understood that it was both ways; they both gave one another trouble.

The WITNESS.—(Continuing.) As a result the oil men tried to hold possession of the land which they got in possession of by force, by the use of gunmen more than anything else, a good many of them. And if an oil man got in possession of a piece of land the first thing he tried to do was to get a rig of some kind upon it, and commence development work. I think it is a fact that the oil men bought up and leased and got hold of every portable rig that they could in the two or three counties here to go over there on to those lands, about that time.

Q. Was it not a fact that they scoured the country to find people who knew about running this drilling rig of any kind?     A. I think so.

(Deposition of L. E. Prestage.)

The WITNESS.—(Continuing.) I would say that they had a good deal of trouble of finding competent drillers, people who were [657] competent to handle that drill at that time.

After I got there that intense excitement lasted up until what we called the second withdrawal. That was about October, 1910. During the time between September, 1910, when I got there, and the second withdrawal, I think Martin and Dudley were very active in trying to hold and get rigs on this five quarters or quarter sections that are here in controversy.

The roads leading into the Lost Hills were very bad at that time. Wasco was the nearest railroad point from the Lost Hills, about 26, 27 or 28 miles. There had been a good deal of heavy teaming over that road; it was nearly impassable.

Q. Nearly impossible to get a road over it?

A. Yes, sir.

The WITNESS.—(Continuing.) When I first went to the Lost Hills in September, 1910, I hauled water fourteen miles to drill with, to run my steam rig with. There was no water fit for domestic purposes anywhere in the Lost Hills at that time. There was no water fit for boiler purposes in the Lost Hills.

Q. Do you know the conditions since then, as to how they get boiler water and domestic water over there? A. Yes, sir.

The WITNESS.—(Continuing.) They pump it in about 14 miles. In the drilling of an oil well there

(Deposition of L. E. Prestage.)

is a good deal of water required. You have to keep the hole partially full of water. You also have to have water to run your boiler. They did not use gas engines very much in those drilling rigs.

The nearest telegraph office was at Wasco, up to the time of the second withdrawal. The nearest telephone office was Wasco, except a farmer's line that run out there, which was about 14 or 15 miles away.  
[658]

Shortly after I went there I think that Dudley and Martin had somebody on each of these quarters in controversy here practically all the time until the second withdrawal.

Q. Were these parties that they had on there apparently active in developing or getting ready for developing them?

A. Well, they always said they were going to work as quick as they could get the material.

Q. How about these portable rigs. Star rigs and Keystone rigs and other portable rigs that they had out there, were they capable of making a hole, most of them?

A. Yes, sir; for shallow territory they were.

The WITNESS.—(Continuing.) I could or would say that the limit of the depth of the hole that they could put down was from 400 to 1500 feet. I could start a hole with one of those rigs and run it out 400 or 500 feet, then continue it with a standard rig. So far as they would sink a hole, it was as good a hole as any to put another rig there afterwards.

(Deposition of L. E. Prestage.)

Q. Where was your camp while you were drilling on the northeast quarter of section 32?

A. It was on the southwest quarter of the east half of the northeast quarter of section 32.

Q. It was on the land covered by your lease?

A. Hold on, I made a mistake. It was across, just across south, on to the southeast quarter of 32, my camp was.

The WITNESS.—(Continuing.) I would say our camp was about 500 feet from our well,

Redirect Examination.

(By Mr. MURPHY.)

Q. Referring again to Martin and Dudley's operations in the Lost Hills during the fall of 1910, you say that they had a number of rigs and a large number of men employed. I will ask you if these men were actively engaged in drilling operations with a view of making a discovery of oil, or were they making a showing in order to hold the land?

A. A great many of them seemed to be mixed up in the fight between the homestead settlers and other locators. Quite a few were actively engaged in drilling. [659]

Mr. HALL.—Now, we offer and read in evidence an affidavit by Orlando D. Barton, taken and subscribed before J. S. Clack, Notary Public, October 19, 1915. This affidavit covers other and different grounds from the deposition that I read of Mr. Barton, and this is offered in all three cases, and I want particularly to call your Honor's attention to the fact that this deals with the *bona fides* of the locators in



(Deposition of L. E. Prestage.)

A-37, the Devil's Den case. That is the only case in which there is a charge that the location—

The COURT.—That is the Devil's Den case?

Mr. HALL.—Yes. That is the only case in which there is any charge that any of these locations were not made with the *bona fide* intention of appropriating the land for the use and benefit of the locators; and in this case the bill alleges that it was made for the use and benefit of the Devil's Den Consolidated Oil Company and not for the locators. This deposition comes in in all of the cases. The original of that deposition does not show any service upon counsel of the defendant, but I have a typewritten copy of it. I have offered the original. The typewritten copy bears the following: "Receipt is hereby acknowledged of the within and foregoing affidavit of Orlando D. Barton, dated October 19, 1915, this 25th day of July, 1916, reserving all objections and exceptions. (Signed) Morrison, Dunne & Brobeck."

(Thereupon Mr. Hall reads said affidavit, which is as follows:) [660]

"State of California,  
County of Tulare,—ss.

"Orlando D. Barton, of lawful age, being duly sworn, deposes and says:

"My name is Orlando D. Barton. I am a resident of Visalia, County of Tulare, State of California. I am a citizen of the United States and I have lived in the State of California for upward of 49 years. My age is 67 years. I was born in the State of Illinois. I have been engaged for many years in pros-

pecting for oil and other minerals and particularly in the State of California. I am familiar with what is known as the Lost Hills Country, and territory situated in townships twenty-four (24), twenty-five (25) and twenty-six (26) south, twenty-one (21) and twenty-two (22) East, Mount Diablo Base and Meridian. I have visited this territory in 1899. I was in the habit and am still of keeping a memorandum of matters which are called to my attention from day to day and writing the same down in my diary books. The following are the facts regarding my operations in that country commencing with the year 1899:

“At the quarter section corner on the north line of Section 28 in township 26 south, range 21 east, M. D. M., is a mound composed of numerous rocks mostly about three inches in diameter. Among and below these rocks I found abundance of sulphur cinders. The rocks are turned blue from the fumes of sulphur. At the northwest corner of Section 20 in township 26 south, range 21 east, M. D. M., similar phenomena occur. This corner is inside the fence. It is not the corner that is now accepted by all parties, but it is the true corner. In the mound is an Indian Mortar, a piece of sandstone split with a punch, and sulphur cinders. These things show that the Government surveyors discovered [661] the sulphur and no doubt the other minerals on the Lost Hills.

“In consequence of a series of dry years beginning with 1889 the west side was almost entirely aban-

done by agriculturists. In 1899, H. J. Light was the sole survivor in the Kettleman Hills. His ranch is on Section 17-24-19. The Kettleman Plains were totally abandoned. They had been cultivated in grain in the 80's. The ranches north and east of the Lost Hills in 25-20 were abandoned when I was first there in 1899. In that year in consequence of the discovery of the 'Blue Goose' well at Coalinga there was plenty of prospecting for oil land. In the spring of that year I. T. Bell, myself and others made the locations at the 'Devil's Den' that were afterward united to make up the 'Devil's Den Consolidated Oil Co.'

"In the fall of 1899, H. J. Light and I. T. Bell agreed to divide the rest of the world between themselves. The south line of Section 27-25-20 was to divide their claims. From there are running straight east Bell was to have all on the north side, and Light to have all on the south side of this line. Bell proceeded to survey and lay out claims. He located all of the public land north of this line in township 25-20. When he arrived at the range line between ranges 20 and 21 he turned south and located with mineral claims all the public land in township 26-21. This gave Bell the south end of the hills while Light claimed the north end. In December, 1899, Light requested me to go with him and look at that little ridge far out on the plains. He said it was about eight miles long. On December 21, 1899, I went with Light to see the little ridge (The Lost Hills). The evidences of oil were so abundant that I recommended to locate the good land on the ridge

instantly, but because it was so near New Year's, we concluded to wait until January 1, 1900. We then located Sections [662] 33 and 29-25-20. Our partner incorporated a company at Visalia to develop the claims. Light exchanged his claims for stock in the new company. This company issued stock and sent an agent to Chicago to sell enough of it to develop the claims. This agent, Dr. Russell, failed to sell any, and the company collapsed before the end of the year 1900. Bell did better at the south end of the ridge. He and his partners organized a company. They raised something like \$15,000.00. The stockholders were mostly Oakland people. Oakland was the headquarters of the company. Bell was elected superintendent. They sent lumber for a standard rig with all the big timbers including walking beams, also plenty of lumber for building purposes.

Bell had with him a man named Thomas Fox. He said he had worked for the Standard Oil Company. Fox located the first well for the company near the northwest corner of 18-26-21. Bell built a two-story house there and had the lumber, timbers and some of the drilling rig unloaded there. He never did get the drilling rig all there. The treasurer of the company took the company's money and skipped, and left Bell in his two-story house scarce knowing where he was at. Utterly discouraged Bell left the place, abandoned the house and other property, and dropped out of sight in the history of the Lost Hills. Meanwhile the Devil's Den Consolidated Oil Company, through one of its subcom-

panies, the Devil's Den Development Company, was drilling on 23-25-18. Rudolph Spreckles and the Western Oil and Refining Company was drilling on 30-24-18. The White Dove Co. with a portable rig was drilling on 27-25-18. The Consolidated Co. reached oil on November 9, 1900, but that well and another they drilled were both ruined by incompetent drillers. The company hung on all the year at great expense and trial to complete their last well. [663] They never quit until June, 1901. The company refused to pay another assessment, and I took charge of their property to try and save something from the ruins. Spreckles kept on until September, 1901. The Consolidated Company had expended \$32,000.00, and Spreckles had spent \$76,000.00. Spreckles' rig was hauled away in September and sent to Sonoma County.

"The winter of 1901 and 1902 saw the end of all development for a long time at the Devil's Den and Lost Hills, and Kettleman Hills. It was a time of terrible droughts. Little rain had fallen for the last ten years. Sandstorms prevailed winter and summer. Rivers of sand moved slowly over the plains covering the scanty brush and putting out the roads. The dust was removed from the west side of the Lost Hills which appeared like a snow bank in the south-east horizon.

"Things settled back to the old style again, but instead of one resident on the plains between Coal-inga and McKittrick there were now two. Light represented the agricultural calling, while I alone represented the mining interests.



“In the winter and spring of 1901, Light and I fully explored the Lost Hills, and we discovered the hot and sweet ground on 13-26-20. We dug holes in the sulphur pans along the apex of the anticlinal fold. We discovered the pure sulphur pan on 19-26-21, and set fire to the dirt at the ‘Bubble.’ Bell’s locations had lapsed, and there was no filing of any kind on the Lost Hills that had not lapsed. From this time on we had everything our own way. There was no one to dispute our claims, and we made locations when and where we pleased.

“On January 9, 1902, we were camped at Bell’s house on the northwest quarter of 18-26-21. It had blown down but we camped in it all the same. Previously to this we had been frequently [664] lost in the fog on the hills. Light drove the team while I held a compass in my right hand, and thus we found our way to the hills and back to the road to the northeast. Once we did not find the hills or anything else that we knew, and had great difficulty to get back to the road. After this we decided to call them the Lost Hills.

“On the day above mentioned among others we located the northeast quarter of 18-26-21. We called it the ‘Lost Hills Placer Mining Claim.’ The names on the claim were O. D. Barton, H. J. Light, R. C. Hardin, Lyman Hastings, R. F. Roth, A. Levis, A. Sweet and W. B. Wallace. This was the first time that the name was sent to the County Recorder. As one year after another passed I grew tired of making locations. I wrote a journal all the time and am using it now. I kept some locations at

the Lost Hills all the time.

“On January 4, 1907, Frank L. Hess of the U. S. Geological Survey came to my house on 23-25-18. He had been sent out to examine the gypsum beds of California. I piloted him to the Lost Hills. He came in an automobile and this was the first automobile to go to the Lost Hills. On January 29, 1908, I piloted Ralph Arnold and Harry Johnson of the U. S. Geological Survey to the Lost Hills. They drove the entire length of the anticline and they gave me the impression that they thought very little of it as an oil proposition.

“The Consolidated Company continued to do the legal amount of work on all of its claims, about sixteen in all. The subcompanies did the same. I took care of all the claims for all of the companies, and did some work on all of them. In Dec., 1906, J. N. Hoyt was with me. He was superintending the work on the Consolidated Co.'s claims. After New Year's he sent his men home. [665] He and I resolved to make one more effort to open up the Lost Hills. We agreed to give Light \$4.00 per day for the use of his team. He was to have five claims. Hoyt went to Hanford and I to Visalia. We made the locators pay in advance this time. We charged one dollar for making a location. Hoyt and I each kept ten claims. I gave two of mine to my brother E. D. Barton. J. H. Butts took ten claims and his wife ten. J. W. McCord took ten claims and his wife ten. Judge Wallace told us to put his name down whenever we wanted a name to fill in, and he got twenty claims, and so we made out a list of names

for one hundred and eighty-four claims.

“On February 13, 1907, Hoyt, Light, and I were again at Bell’s fallen house on 18–26–21. The lumber had been stolen, nothing but the big timbers were left. We worked several days and located all of Sections 8, 18, 20, 28, 30 and 32 in township 26 south, range 21 east. I considered the northeast quarter of 30 to be the best claims. We located that quarter for the Consolidated Company.

“On May 28, 1908, the Consolidated Company again started drilling. This time on 22–25–18. This move revived the oil business at the Devil’s Den and Lost Hills. I was their superintendent and had little time to give to the Lost Hills.

“In the spring of 1907 the locators on the Lost Hills gave ‘Power of Attorney’ to five of its members, these members to act for them all. These agents proceeded to organize the ‘Lost Hills Oil Co.’ The directors were J. W. Fewel, B. J. Ball, Lyman Hastings, A. T. Lockwood and E. I. Foemster. Fewel was President, Feemster Secretary, and Lyman Hastings was general manager and geologist. The firm of Jackson and Gamble were fiscal agents. They had promised to sell stock enough to put down a well. [666] Hastings reported that there was oil at the Lost Hills, but they would have to go more than 2,500 ft. to reach it.

“The Lost Hills Oil Co. got out a flashy circular. Jackson and Gamble had about \$3,000.00 subscribed for stock already from the locators. They wasted valuable time when it was almost too late they went among their old friends in Madera County and pub-

lished glowing accounts of the possibilities of oil at the Lost Hills. This had its effect. Their neighbors bought no stock but were anxious to get land. The Lost Hills Oil Company's option on the locations expired March, 1908. On March 8th, J. W. Anderson filed a homestead on the southwest quarter of Sec. 32-26-21 and a desert land claim on the north half of that section. J. W. Anderson, Jr., filed a homestead on the southeast quarter of the same section; other men from Madera followed. Then more from Kerman and different places until all the public land in the township was covered with agricultural filings except Sections 30 and 18. Soon after Arnold and Johnson's visit to the Lost Hills above mentioned Sections 30, 18, and the north half of 32 were closed to agricultural filings; and reserved as mineral land.

"The locations were then leased to the 'Square Deal,' a Hanford Company. This company built three houses on the southwest quarter of 18. Charles Barrett whom we had located on ten claims, undertook to finance this company, J. H. Butts of Hanford was largely interested in the 'Square Deal.' He also was one of the original locators. Late in 1908 the Square Deal Company sent Butts to the Lost Hills. This was the first time he had ever seen the place. With 27 men and 20 horses he did the assessment work on all six of the sections, including the Consolidated Company's claim on the northeast quarter of 30. [667]

"Later this company failed. Barrett could not raise enough money. They hauled away two of the

houses on 18; and on March, 1909, the 'Square Deal' option on the location lapsed.

"The locators immediately organized themselves into the 'Lost Hills Mining Co.' J. H. Butts was elected president, and I was a director. I cannot remember the others. The company was capitalized at \$36,800.00, or at the rate of \$10 per acre for their claims. We intended to drill ourselves in the fall. On July 10th, I resigned the position of superintendent of the Devil's Den Consolidated Oil Co.

"I knew that E. R. Dudley was a good driller. In 1900 he had drilled a well on the south side of Kern River through boulders, gravel and sand, and used only a string of stove-pipe casing to a depth of 850 feet. I had frequently tried to get him to take hold and drill a well at the Lost Hills.

"In the year 1909 the firm of Martin and Dudley began to show some interest in the oil business. They came frequently to the west side. I showed them around. Among other places I took them to the Lost Hills. On October 3, 1909, I saw the firm's automobile in front of Ed Bush's office at Hanford. After I had pictured to them the great amount of oil there must be at the Lost Hills and assured them that it could be reached inside of six hundred feet, they agreed to take hold and develop the claims.

"Ed Dudley said he would drill the first well himself. I went instantly to J. H. Butts and brought him to see them. J. N. Hoyt came along and between the six of us we agreed on all the essential points of a contract to develop our claims on the Lost Hills. Judge Wallace afterwards wrote out



and prepared the contracts. They were to have half of all of our claims that they developed except those on 18 where they were to receive more than [668] one-half. Martin and Dudley stipulated that the Lost Hills Company could keep one man at the well to see that they worked with reasonable diligence and report when the well was finished. No other member of our company was to be allowed at the well while it was being drilled. I was chosen for this position. Afterwards it was agreed that our president should have the right to come to the well.

“On November, 1909, J. N. Hoyt and I moved to the house on 18-26-21. He brought men and teams and did our company’s assessment work. I did the work on the Consolidated Company’s quarter. On Dec. 14th Hoyt’s men went away and on the 15th he went away. I was alone.

“Martin and Dudley organized the Lakeshore Oil Company about November 1, 1909. The first directors were J. D. Martin, E. R. Dudley, B. B. Duley, E. C. Farnsworth, C. H. Giddings, Daniel McFadzean and J. Sub. Johnson; Giddings was president and treasurer and Johnson was secretary, with the office 204 E. Main St., Visalia, Martin and Dudley were to do the Lakeshore Oil Company’s work. On Christmas, 1909, their teams arrived at my house on 18. They brought the drilling rig, one of Dudley’s own planning, lumber and supplies. Frank Gains was foreman of the men that came. Warren Bruce was the carpenter, Jim Bruce was his teamster. There was also Byron Collins and the two Ireland brothers. The next day they commenced to haul the material to

the northwest quarter of 30 to the place that I had long ago picked out as the best place to drill a test well on the public land in the lost Hills. Bruce built a house near the quarter corner on the north line of 30. On January 19th they all moved to this house. They all cut brush to fire the boiler. They sunk a pit and set the rig over it.

“On February 20th Ed Dudley commenced drilling. There was first six feet of gypsum, then sixty feet of tough sandstone, [669] the cementing material of which was selenite. Then came very hard calcereous sandstone. On March 8, 1910, at 3:50 P. M. we set fire to the gas that came from the well. I quote from my journal:

“‘It burned with a yellow and blue hydrocarbon flame. Harry brought up the tool a little before sundown. The bit would not screw off and they had trouble to make the valve stay open. At exactly sundown they got the valve open. The pulp showed spots of oil, one of them was at least five inches across. Numerous splotches of oil run down in every direction. So it is at last proved that there is oil in the Lost Hills. The combination tool was cracked entirely around where it was welded to the jars. It must go to a machine shop. The formation is sandstone. The cementing material is calcite.’

“The well was at that time 160 feet deep.

“No more drilling was done in March. But little in May or April. On June 3d the gas made such a noise that Dudley corked the well with sandbags. He went away. We had great trouble to stop the noise

so people would not hear it on the outside. (The well was fenced in.) Little drilling was done in June. Dudley was setting up rigs in other places and drilling on Sections 28 and 34.

“On July 15 Dudley again started the Lakeshore rig. The pulp showed oil. On July 17th Walter Moran fixed an apparatus so we could use gas from the well under the boiler. On July 19th the gas blew all the mud and water out of the well.

“On July 21st Dudley and all the hands were sick, they went away. Walter Moran drilled, Harvey Chase helped. Pearl Moran cooked. I was too sick to go with Dudley. We now know that it was the gas that made us sick.

I will make a few quotations from my journal:

“ “July 23d: Martin and Gray arrived. Moran turned cable end for end. The hole is 366 feet deep. The casing is about 300 feet. The shale gets darker.

“ “July 24th. At 11 A. M. the hole was 405½ feet deep. Formation soft shale covered with oil. [670]

“ “July 26th. Well 442 feet deep, casing is stuck at 306 feet by the damaged shoe. Hard shale with oil in the cracks.

“ “July 26th. At 463 feet oil showed more plentiful. It is a heavy oil. Fine grained blue sandstone and shale with a little gravel.

“ “July 26th. Bailed out about 4 barrels of oil this morning. We saved a five gallon can of it. I have a bottle full. Mathews brought Ed Dudley, Arnet Ireland and Jim Brune.

“ ‘July 29th. Well about 527 feet. There is 400 feet of oil in it. Think it is about 24 fine. It is now a 200 barrel well. Moran drills at about 525 feet the drill struck hard sandstone.

“ ‘July 30th. Ed bailed out 25 barrels of oil. It only lowered the oil about 12 feet. It filled again in a few minutes. It is a 300 barrel well or more. It threatens to flow. Ed went away.’

I find one of my personal memorandum books which I took with me to the Lost Hills in which I made entries, the following entry made by me at the time dated which reads as follows:

“ ‘April 12, 1908. I am getting ready to go to Lights and Lost Hills. Hoyt, Light and I made the Lost Hills locations on the 13th, 14th and 15th of February, 1907.

“ ‘April 13, 1908. Light and I are at the lumber on 18-26-21. I put large stake with notice at the northwest corner of section.

“ ‘April 14th, 8:15 o'clock. Light and I are now at the southeast corner of 32 on the road. We set stakes four feet long with notice in top here last night. Yesterday we went along the west side of 18, thence along the north side of the same section, thence along the east of it, thence along the west line of 20, thence along the east line of 20, thence along the west and south line of 32 to this place. We set four stakes at all the section and quarter section corners with notices on all of them. (I have a dash in my book showing that I have moved on.) We are at the northeast corner of 32. I nailed to two notices to five

and one-half foot stake. Found out location for the southwest of 28 and the northeast of 32.

“ ‘9:30 o’clock.

“ ‘We are now at the quarter section corner on the north of 32. (In all of these descriptions I refer to Township 26 south, Range 21 East M. D. M. & M.) Line mound is made of gypsum. (I have a dash in my note-book showing that we moved on further.) We are at the southwest corner of 30, nailed notice to stake five and one-half feet long. Our old mounds in good repair. The surveyor’s stake is still here. Thus far we have found the old stakes. [671] (I find another dash showing that we have moved further on.) We are now at the quarter section corner of the west line of 30. Put up notice and stake. (I find another dash showing that we have moved further on.) We are now at the northwest corner of 30. Put up notice and stake.

“ ‘12:35 P. M.

“ ‘We are now at the quarter section corner of 30. Found our location notice all right. Put up printed notice three by thirteen inches. It is consolidated notice on a stake  $6\frac{1}{2}$  feet long. (Find another dash showing that we have moved further on.) We are now at the northeast corner of 30. Put up a consolidated notice on the stake seven feet long. There are now three stakes here, to wit: The surveyor’s stake, the one we put up yesterday and the consolidated stake and Light has just found the old govern-



ment stake laying on the ground just west of these stakes.

“ ‘2 P. M.

“ ‘We have placed stake and notice on the quarter section corner on the south of 20. (Find another dash showing that we have moved further on.) We nailed notice to a post six feet long on the southeast corner of 20. It is at the southeast corner of the Kings claim and on the northwest corner of our claim on 28. (When I refer throughout this statement to our claims, I mean the claims that we located in 1907.)

“ ‘5:35 P. M.

“ ‘We are not at the southwest corner of 18 and the southwest corner of the Lucille claim. We have put stakes and notices along the east and north line of 20 and along the south line of 18. Cold and windy.

“ ‘We went there early in 1908 so that we could see to it that the lines of our locations in 1907 were plainly marked and would be in evidence in case anybody else came to that locality.

“ ‘Sixty feet in depth of the top of the main ridge of the Lost Hills is composed of gypsum. Near the surface most of the gypsum is pure, it will go 100% and generally speaking about two feet below the surface there is gypsum that will go about 60% pure to a depth of seven feet. Below that the gypsum is mixed with sand, charcoal, dust and sage brush on to a depth of about sixty feet. I saw acres and acres of pure gypsum in these sections which I have above de-

scribed uncovered by the wind. I also saw gypsum in large quantities uncovered in the first assessment work that was done following our locations. As early as 1900 I dug numerous holes on these sections down to the gypsum and some places through the gypsum and our line mounds were frequently made of gypsum and in digging holes to get dirt to make the mounds we were careful to dig them down to the gypsum in nearly all cases. That is to say on that part of the hill where the gypsum is found, that is on the main ridge. That includes about two-thirds of 30 and about two-thirds of 32 along the anticline.'

"Before I went out to the Lost Hills in 1907 to make the [672] locations upon which the present applications for patent are now pending, J. N. Hoyt and I saw various intending locators, obtained their authority to make the locations on their behalf and had them in each instance advance to me the necessary *pro rata* expense and I acted as their agent in making the locations.

"In 1909 and 1910 I was superintendent for the Lost Hills Mining Co., and Devil's Den Consolidated Oil Company. The Lake Shore began drilling February 20, 1910. The next rig to start drilling by Martin and Dudley was the star rig on Section 28-26-21 on June 13, 1910. Shortly afterwards the Walter C. Moran rig on Section 34 started. The star rig was moved twice on 28, first to the northwest quarter and then to the northeast quarter. The next rig to start drilling was on the southwest quarter of Section 32.

It was the rotary rig. It arrived there about July 8, 1910 and commenced drilling immediately. The rig ran whenever they could get water for it the rest of the season. They only got down to between four hundred and five hundred feet and I don't think got any oil.

“Martin and Dudley were interested in the north end of the Lost Hills. They brought in more than one rig and set up there—all north of sections thirty and thirty-two. I think the next rig was the Prestage rig which arrived Sept. 24, 1910 on the northeast quarter of 30. On August 2, 1910 a gas rig was moved on the northeast quarter of Section 32, but did not start drilling for a long time. Something was wrong with it and it would not start. A short time after the arrival of the Prestage rig W. K. Flynn brought in a gas rig and placed it on the northeast quarter of Section 32 and it remained there until March, 1911. Along in November, 1910, the Lost Hills Company entered into a new contract with Martin and Dudley, in which they required Martin and Dudley to put a drilling [673] rig on all of the Lost Hills Mining Company's claims, and proceed to drill without any unnecessary delay. Before the close of the year Martin and Dudley had a drilling rig on all of the Lost Hills Company's claims. Martin and Dudley had extended their operations to other parts of the field, north and south, and some of the Lost Hills Company people were afraid Martin and Dudley would neglect the Lost Hills Mining Company's claims; that is the reason the contract of November, 1910 was entered into. For myself I was

satisfied that Martin and Dudley were doing all they could to develop the claims, but I was instructed to hold the big stick over them and make them fulfill the letter of their contract. There were no other rigs on Sections 30 or 32 during the year 1910 other than I have mentioned. Some time during year 1910 a rig was placed on each and every quarter-section.

“The soil in the Lost Hills is soft, porous, and entirely undermined by burrowing animals. An automobile cannot go across the hills until a road is broken and a wagon sinks in continuously a foot or more, sometimes up to the hub, and rain makes hauling worse. There were absolutely no roads in the Lost Hills when the Lake Shore rig was hauled in December, 1909. The winter of 1910 and 1911 was a very wet, cold, stormy winter. The new road that we had made, in different directions over the hills, were at times totally impassable. At one time we received no meat from Wasco for four days. At times during the months of January, February and March, 1911, every rig in the Hills was shut down, either for the want of oil or water. The bad weather continued up until nearly the last of March. Oil for all the rigs was obtained from the Lake Shore well. Martin and Dudley kept all of the rigs running that was possible. There were no houses on the hills—we lived in buildings made of canvas, some of which had lumber floors. The bad [674] weather prevented us from working out of doors and the work during the last five months was pursued under very discouraging circumstances. Martin and Dudley generally kept about five of the rigs running, depending

upon whether they could get oil or water to them, or whether they could get the men to work—this refers to all the wells they had in the hills. Martin and Dudley had about 12 men employed on July 1, 1910. They kept adding to their force until they had about 40 men on January 1, 1911.

“I have heretofore stated that there was little drilling on the Lakeshore No. 1 well, April and May, 1910, and that Mr. Dudley went away on June 3d. As a matter of fact, my memoranda show that I was away from the Hills from April 14 to 27, and from May 5 to 14, so have no record of what went on at that time. On April 9th tools were dropped in the well which caused a delay. Mr. Dudley left in June for the purpose of getting tools repaired. We had a great deal of trouble with broken tools. Whenever Dudley was away drilling was left in charge of Harry Trimbley, and he would get along the best he could. I was away from July 1 to July 6. In July they were drilling on very hard sandstone, the cementing material of which was calcite. This hard drilling kept the tools continually out of repair, until finally Dudley laid the old combination tool aside and had Walter Morna go ahead with a drill. For all of these rigs it was necessary to haul water at least five miles, and a large part of the water for drilling was hauled eight miles and some of it twelve miles. All the water we used for cooking and drinking was hauled twelve miles.

“J. N. Hoyt and I located the NE.  $\frac{1}{4}$  30-26-21. H. J. Light was with us at the time. For locators we made use of the names of stockholders of the



Devils Den Consolidated Oil Co., and I expected the men whose names we used to deed the locations over to [675] the company for the benefit of themselves as well as the company. I had authority

~~from all of them to make use of their names~~  
O. D. B.

~~for the benefit of the company.~~ I also had authority from them to make locations for them individually for which they agreed to pay me, but I am not sure that I had spoken to all of them at the time I went over to make these particular locations, but I had spoken to all of them at some time.

“I should like to add that I do not intend to make any statements in this affidavit which contradict that statement which I have made in the affidavits as attorney-in fact for the Lost Hills Mining Co. accompanying the application for patent. If I have made any such statement it is because of a lapse of memory; at the time I made those affidavits I had my data all in shape and was at the Lost Hills where I could talk with the drillers, etc.

“During the years 1901 and 1910 I was superintendent of the Devil’s Den Consolidated Oil Co. at a salary of \$50 a month. I was also a stockholder in this company.

“In the year 1907 I made arrangements with the following people to locate them on an oil location; Charles Togni, Dan Sweitzer, E. C. Farnsworth, A. R. Orr, M. T. Mills, C. J. Giddings, L. C. Hyde and W. B. Wallace.

“I had no power of attorney executed by these men to do this, but I had a verbal understanding to use their names on the location notice. I had no promise

or definite understanding with these men that they would deed the claim to the Devil's Den Consolidated Oil Co. The reason I did not make use of my own name in the list was because I would not be in Visalia to deed to the company. Although I had no promise from these men that they would deed to the company I expected that they would deed to the company just as they did. [676]

"I did the 1909 assessment work and found gypsum on the claim. I have never shipped any gypsum from the claim though it is of good grade. I planned to do so and contracted with my associates but as I severed my connection with the company March 30, 1911, and others got control I did not get to ship any of the gypsum.

"According to notes which I kept at that time, the Prestage outfit moved on to the NE.  $\frac{1}{4}$  of Sec. 30-26 S. 21 E., M. D. M., on September 24, 1910, and on October 2 was 80 feet down and on December 22, 1910, had discovered oil. I estimated the well as about a 200 barrel well.

"I had 924 shares of stock which I sold at \$2.00 a share to the Cameron crowd about when assessments were levied and it was announced that the company planned to drill nine more wells, which meant nine more assessments.

"(Signed) O. D. BARTON.

"Subscribed and sworn to before me this 19th day of October, 1915.

[Seal]

"J. S. CLACK,

"Notary Public in and for the County of Tulare,  
State of California." [677]

Mr. HALL.—I now offer and read in evidence the affidavit of J. H. Favorite. It is offered in all the cases. It is signed by J. H. Favorite before T. L. Baldwin, Deputy Clerk of the United States District Court for the Northern District of California, showing receipt of copy, signed by Morrison, Dunne & Brobeck and Joseph D. Redding, on the 17th day of August, 1916.

(Thereupon Mr. Hall reads said affidavit, which is as follows:) [678]

“United States of America,  
Northern District of California,  
State of California,—ss.

J. H. Favorite, being duly sworn, on oath deposes and says:

I am a citizen of the United States and over the age of 21 years. I am employed as a Special Agent of the Department of Justice, and am engaged in the work of investigating the rights of claimants to oil lands in Kern County, California.

On June 4, 1916, I visited the NW.  $\frac{1}{4}$  of Sec. 30, SE.  $\frac{1}{4}$  Sec. 30, NE.  $\frac{1}{4}$  Sec. 32, NW.  $\frac{1}{4}$  Sec. 32, and SW.  $\frac{1}{4}$  Sec. 32, all in T. 26 S., R. 21 E., M. D. M. On said date I found on the several quarter sections mentioned above, producing oil wells as follows:

On the NW.  $\frac{1}{4}$  of Sec. 30, three wells producing oil, all of which were being pumped at the time of my visit to the land.

On the SE.  $\frac{1}{4}$  of Sec. 30, five wells producing oil, all of which were being pumped at the time of my visit to the land.

On the NE.  $\frac{1}{4}$  of Sec. 32, seven wells, five of which

said wells were being pumped at the time of my visit to the land.

On the NW.  $\frac{1}{4}$  of Sec. 32, nine wells, six of which were being pumped and were producing oil at the time of my visit to the land.

On the SW.  $\frac{1}{4}$  Sec. 32, one well producing oil, which said well was being pumped at the time of my visit to the land.

(Sgd.) J. H. FAVORITE.

Subscribed and sworn to before me this 9th day of June, 1916.

[Seal] (Sgd.) T. L. BALDWIN,  
Deputy Clerk U. S. District Court, Northern District  
of California. [679]

Mr. HALL.—I offer the affidavit of C. L. McDonald, subscribed and sworn to before A. H. Thomas, Notary Public, on August 10, 1916, at Huntington, Oregon.

(Thereupon Mr. Hall reads said affidavit, which is as follows:) [680]

State of Oregon,  
County of Baker,—ss.

C. L. McDonald, a citizen of the United States, whose residence and postoffice address is Los Angeles, California, being duly sworn, deposes and declares:

I am in charge of the interests of the Acme Cement Plaster Company on the Pacific Coast, both as to operation of properties and sale of products. Said company also owns gypsum properties and plants in many States in the Middle West. I have been con-

nected with the gypsum business for more than twenty years.

Some three or four years ago at the invitation of a Mr. Cameron, president of an oil company in the Lost Hills, Kern County, California, I visited the Lost Hills to inspect certain deposits of gypsum which Mr. Cameron stated existed on the lands of his companies. I made this visit as a representative of the Acme Cement Plaster Company with a view of acquiring the same if they proved satisfactory.

I was shown the gypsum deposits by a Mr. Anderson, geologist of the oil company. I examined the various showings from south of the main camp of this company to a point considerably north of the most northerly producing oil wells. I remember three long trenches on a hillside near the north end of the oil productive district. During this examination, I took some twenty or more samples.

As a result of said examination and sampling, I was convinced that the alleged deposits of gypsum or gypsite were so lacking as to quantity and quality that they were of no value to us, and for this reason dropped the matter entirely.

Owing to the favorable location of the oil fields in the San Joaquin Valley, both as to markets and fuel supply, coupled [681] with many reports as to gypsite or gypsum deposits. I have made other examinations in the hope of finding a valuable deposit, but in none of these examinations in the vicinity of McKittrick and Taft did I find anything that war-



ranted following the examination with an attempt to secure the same.

With regard to the land plaster business, I have never sold material for my company which ran below 80 to 85 per cent gypsum, and gypsum sold for other purposes must be purer than this.

(Sgd.) C. L. McDONALD.

Subscribed and sworn to before me this tenth day of August, 1916, at Huntington, Oregon.

[Seal] C. L. (Sgd.) A. H. THOMAS,  
Notary Public.

*My commission expires.*

Commission expires July 26th, 1920. [682]

### **Testimony of J. G. Dean, for Plaintiff.**

J. G. DEAN, produced as a witness on behalf of plaintiff, being first duly sworn, testified as follows:

Direct Examination.

(By Mr. HALL.)

The WITNESS.—I reside at Glendale, California. My occupation is that of cement chemist. I am a graduate of an institute of learning.

Q. How long have you been engaged or followed your occupation as a cement chemist?

A. Eighteen years.

Q. Where have you received your education and experience in that work?

A. My college education was received at Albion College, Michigan, and since then I have been actually engaged with the cement industry in the United States and Canada.

(Testimony of J. G. Dean.)

Q. What different places in the United States?

A. At Cement City, Michigan, and at El Paso, Texas, and Victorville, California.

Q. How long have you been connected with the Southwestern Portland Cement Company at Victorville?

A. The Victorville Company has two plants, one in El Paso, and one building at Victorville. At Victorville I have been since the 10th day of May, this year.

Q. In your work as a chemist for the cement company, have you familiarized yourself with the quality of gypsum that is used in the making of cement?

A. We use gypsum. It is necessary to use gypsum in making cement to regulate the setting qualities of the cement itself.

Q. Please explain to the Court the uses of gypsum in [683] the making of cement. What is the purpose and object of putting it into cement?

A. Without the use of gypsum the ground cement itself would set immediately as soon as the water came in contact with the cement, and in order to delay the setting quality, in order to have the concrete placed in place without disturbing the process of setting, there is a certain percentage of gypsum that has to be added in order to delay the setting for the proper time.

Q. Are you familiar with the standard formula that is generally used in the commercial world in making cement?

A. As connected with my own experience.

(Testimony of J. G. Dean.)

Q. What per cent of material other than pure cement is permissible for use in the making of a commercial cement which will meet the requirements of the commercial world generally?

A. There are specifications that cover this matter.

Q. What specifications do you follow?

A. Principally the United States Government's specification.

The WITNESS.—(Continuing.) I am familiar with the circular of the Bureau of Standards, known as Circular Number 33.

Mr. DUNNE.—What is the date?

Mr. HALL.—The second edition, July 1st, 1913, printed at the Government Printing Office in 1914.

Q. Are you familiar with whether or not that is the latest bulletin of the Government with regard to cement?

A. I am not sure.

Q. You have been familiar with this one?

A. We have been furnishing cement for the Elephant Butte Dam, and those are the specifications we have had to follow in that connection. [684]

The WITNESS.—(Continuing.) Under those specifications, in order to regulate the setting, they permit the addition of 3 per cent, of other materials, meaning, in this case, gypsum, to the calcined material.

Q. In adding this gypsum, have you had occasion to test the different grades of gypsum that may be used economically in the production of cement to meet the specifications and requirements?

A. Not necessarily that way. I have used differ-

(Testimony of J. G. Dean.)

ent grades of gypsum, sometimes, because I was forced to. But usually the setting time is a very hard thing to get around in the cement business. It is a ticklish proposition—lots of trouble—for the cement manufacturer, due to the improper setting. It is hard work for the contractor to understand. We have always been forced to use the very highest grade of gypsum that we could get.

Q. About what per cent. of purity is required in the gypsum that you use in making high-grade cement?

A. I never personally like to go below 90 per cent if possible.

Q. Do you purchase large quantities of gypsum at your plant?

A. We use about 3 per cent of the calcined material, and we are held down to that one point.

Q. Can you use profitably a cement or gypsum in the making of cement which falls below 85 per cent. in purity?

A. The specifications call for 3 per cent to be added. They also give us a leeway of 1.75 per cent sulphuric anhydride, while a pure gypsum will only give us about 1.4 per cent if we use 3 per cent. That means that they are a little bit contradictory. And in some cement it is hard work to regulate the setting with [685] less than 1.4 per cent sulphuric anhydride, so that it is a difficult matter, and that is the reason why it means that we have got to use as pure a gypsum as possible.

Q. Would it be practical and economical, in your

(Testimony of J. G. Dean.)

opinion, in making of cement to use a gypsum that was 75 per cent pure?

A. Economically, if the cost of the cypsum is less than the manufacturing cost of cement, the more gypsum we can use the better. But we are reduced to the 3 per cent.

Q. I am asking you to take into consideration the limitation upon the amount of gypsum that you can use in making cement and taking into consideration that limitation, can you use a gypsum which is only 75 per cent pure, with economy, and with certainty in the production of your cement?

A. We don't like to. We have not done much work along that line, because it is a delicate problem, and we hate to run any chances without cement in trying out an impure product of that kind. The setting time, as I say, is a problem with the cement manufacturer.

The WITNESS.—(Continuing.) It is true generally in the cement-making world that it is the object and purpose of the cement people to require and use in their product a gypsum that runs as near pure as possible. That is all that is in our—intention. We try to keep the gypsum that we are using at our plant at least 90 to 92 per cent pure. That is what it runs.

The source of our supply of gypsum at the El Paso plant is at Findlay, Texas. We have not yet started up the plant at Victorville. I think they have purchased gypsum in the State of California for use at that plant, but I am not sure. I have not analyzed



(Testimony of J. G. Dean.)

any of that gypsum. I do not know what they pay per ton for gypsum that they purchase in California. I have no positive [686] information what it costs per ton to deliver at the plant in Texas.

Cross-examination.

(By Mr. DUNNE.)

The WITNESS.—We have a plant in Texas where they use gypsum.

Q. Have you any personal knowledge of the percentage to which that gypsum runs that is used in the Texas plant?

A. About 40 to 42 per cent of sulphuric anhydride, as I remember.

The WITNESS.—(Continuing.) I am connected with the California plant.

Redirect Examination.

(By Mr. HALL.)

The WITNESS.—When I say 40 to 42 per cent. of sulphuric anhydride, that is about 90 per cent of pure gypsum. Pure gypsum runs about 46½ per cent sulphuric anhydride.

I was at the plant in El Paso a little over four years.

Q. And how long have you been connected with this plant that is being constructed in California?

A. I have been here since the 10th of May. [687]

**Testimony of D. A. Mulvane, for Plaintiff.**

D. A. MULVANE, produced as a witness on behalf of plaintiff, being first duly sworn, testified as follows:

(Testimony of D. A. Mulvane.)

Direct Examination.

(By Mr. HALL.)

The WITNESS.—I reside at Los Angeles. My occupation is that of manufacturer of gypsum products. I have been personally in charge of the manufacture of gypsum products for something over eight years. All of that eight years has been spent in the gypsum business in the State of California. I am connected with the Consolidated Pacific Cement Plaster Company. That plant is in San Bernardino, California, at Amboy. The plant has been in operation a little over ten years. It is right on the line of the Santa Fe and on leased grounds from the Santa Fe. We have tracked facilities which connect our property with the Santa Fe railroad.

We have gypsum claims at Amboy covering nearly three thousand acres, but in that there is something like eight hundred acres of merchantable gypsum that we have developed. The vein of gypsum that we have developed at Amboy runs from five to twelve feet in various parts of the field. It is in crystallized form. It is called a selenite, but it comes in crystals. We sell the gypsum produced at our plant for manufacturing hard wall plaster, casting plaster, and to the Portland cement mills for their use, and a great amount as land plaster—fertilizer.

There is on an average of 94 per cent gypsum in the product which we use which we usually sell on the market for the making of cement.

Q. Is there any market for gypsum for use in cement works that falls below 90 per cent?

(Testimony of D. A. Mulvane.)

A. Well, there is one contract with the Riverside Portland and California Portland for an average of 94 per cent. If it [688] falls below 92 the California Portland makes vigorous kicks and don't take it, which occasionally occurs, and the Riverside Portland is not quite so particular.

Q. How light a percentage of pure gypsum will they take?

A. When it gets down to 90 they are through with it.

Q. You mean they reject it if it falls below 90?

A. Yes, sir.

Q. In making this hard plaster and other materials of that sort, used in building houses, what per cent of pure gypsum is required in the market for the manufacture of such products as that?

A. Well, you can use lower grades than that. Of course, you don't have as good material. It don't carry as much sand as the pure gypsum. The more pure the gypsum you get, the larger amount of sand you can use.

Q. Usually what per cent of pure gypsum is required by the people who make these hard plasters?

A. There isn't any standard in California.

Q. Do you know of any particular plants, or in your work, do you know what grade is used?

A. Well, I wouldn't like to state that. While I have got my ideas and have made some little examination, I would not want to—

Q. I simply want your opinion as to what can be profitably used.

(Testimony of D. A. Mulvane.)

A. There is one plant, as I understand, that has 85 per cent.

The WITNESS.—(Continuing.) I do not know of any plant that uses a lower grade of gypsum than that, I know a plant that uses a higher grade of gypsum than that. I meant to say the Nephi, but that is not in this State. [689]

Q. Do you know what grade they use?

A. I think it runs close to 97 or a little better, but that is something that I have not absolute information on. But from the sample I have seen and examined, that is what I think.

Q. Have you been familiar with the prevailing market price of gypsum at Amboy for the last eight or ten years?

A. The market varies a little. I don't know hardly whether I ought to state on that.

Q. What is your best impression now as to what has been the general prevailing market price during the last ten years? I will ask you first about the price of gypsum running from 90 to 100 per cent pure?

A. Well, we sell for land plaster on a guaranty of 92 per cent for \$2.25, sacked and ground fine. That is, we don't furnish the sacks. They furnish the sacks. Jobbers understand that. That is the lowest price. And we export some through the market to the fertilizer companies.

The WITNESS.—(Continuing.) That has not been the prevailing price for the last ten years; that

(Testimony of D. A. Mulvane.)

is lower than the ordinary price. It has been up as high as \$3 per ton.

Q. What have you been receiving and what is the prevailing market price for the last ten years for gypsum that runs from 92 per cent up to pure gypsum? That is, used in the making of cement.

A. It has run all the way from \$1.25 to \$2.25, but there was not been any \$2.25 stuff for four years.

The WITNESS.—(Continuing.) We have at our plant at Amboy what we call our waste, and that averages about 65 per cent. It is mixed with a fine sand that we cannot separate without blowing away the gypsum. We sell a little of the 65 per cent gypsum, and [690] we have a lot of it on hand.

Q. What has been the prevailing market price of that 65 per cent gypsum in the last ten years at your Amboy plant?

A. It has been up as high as \$2.23, and we are selling what little we sell from a dollar to a dollar and a half. We don't sell any more of it than we can help.

Q. At your plant at Amboy, how far do you have to transport your gypsum from the beds, where it is in the ground, to the railroad?

A. We parallel the Santa Fe road and we have a little dinky line of our own two and a half miles long from the plant. That is practically on a dead level.

Q. How is the road operated? A. By steam.

Q. Do you procure this pure gypsum directly from the beds and sack it and ship it, or is there some process by which it is purified?



(Testimony of D. A. Mulvane.)

A. As it lies in the bed it runs from 80 to 85 per cent, and we have to crush that and run it through a dryer, over screens, and an aspirator, and about one-third goes out as waste. But of that waste about one-half of it will run 65 per cent. The air blows away the rest, and that 65 per cent we sell a little of it as land plaster. [691]

San Francisco, California, Wednesday,  
August 23, 1916, 2 o'clock P. M.

D. A. MULVANE, recalled.

Direct Examination (resumed).

(By Mr. HALL.)

Q. This morning, Mr. Mulvane, you spoke of using 65 per cent pure gypsum or gypsite, as land plaster or fertilizer. Have you made any investigation to ascertain whether or not it is more economical to use a poor plaster or gypsite containing 65 per cent, or more economical to use a richer gypsite, such as from 90 to 100 per cent?

A. Yes. We are trying to get our customers to use the higher grade. In fact, they get better results, and it makes a firmer business for the future.

Q. Does the fact that a lower grade of gypsum contains impurities make it require a greater quantity for a given acreage that is desired to be plastered with land plaster?

A. Of course, the lower the grade and the more foreign matter in it, the more it requires to the acre to get the gypsum, unless there is something else in there that is valuable. Occasionally that is found.

(Testimony of D. A. Mulvane.)

The WITNESS.—(Continuing.) I don't know of any deposits in the west side of the San Joaquin Valley that contain other elements that are valuable. Our company has caused investigations generally to be made in the State of California with respect to the deposits of gypsum or gypsite for commercial purposes; we have examined a great many deposits in the State. Some years ago our superintendent went up through the valley, to the McKittrick district, and I don't know where all he was, and he reported at different places finding gypsum, but not in paying quantities, and [692] not a menace to our trade.

Q. In the handling of your product at Amboy does the fact that it is overburdened with earth have any effect upon the value of the deposits?

A. There is practically no overburden, but there is from four to five inches of low grade that we scrape off.

Q. If a deposit of gypsite is covered with from two to six inches of ordinary soil which contains no gypsum at all, does that have any effect upon the value of any gypsite in the deposit?

A. I should say not if you can get the gypsite out.

Q. If it is deposited in an irregular way so that there is difficulty in removing the overburden, does that have any effect on the value of the deposit?

A. If you cannot remove the overburden without mixing it, it lowers the grade of the gypsum below.

The WITNESS.—(Continuing.) If there are intrusions of earth or nongypsiferous contents which

(Testimony of D. A. Mulvane.)

are sometimes found in the deposits of gypsite, it lowers the grade of the deposit, whatever there is.

If the tract of land which is involved in this suit and described as the southwest quarter of the southwest quarter of the northeast quarter of Section 30, contains a deposit of gypsum approximately two acres in extent, averaging 19 inches in thickness, the gypsum being 66.13 per cent pure gypsum, I would say that that deposit was of no commercial value.

Q. Would you think that such a deposit as that would add any value to the land itself?

A. Gypsum does add a value to farm land.

The WITNESS.—(Continuing.) From a commercial standpoint it would not. Such a deposit of gypsum, in my opinion, could not [693] be mined and worked profitably.

If on the northeast quarter of the southwest quarter of the northeast quarter of section 30 there was a deposit of gypsum that was approximately about one-half an acre in extent of an average thickness of twelve inches, and the deposit was 63.65 per cent pure gypsum, it would not be of any commercial value whatever.

Q. If on the southeast quarter of the southeast quarter of the northeast quarter of Section 30 there is a deposit of gypsum averaging twenty-seven inches in thickness, containing 44.52 per cent gypsum, and covering an area of about one acre, would such a deposit as that add any commercial value to the land described?

A. Has it any overburden? If it had no over-

(Testimony of D. A. Mulvane.)

burden and had a farm adjoining, it might be of a little value to haul to that farm. But for commercial value for shipping purposes it would not.

Q. I am not certain whether that has an overburden or not. If the southeast quarter of the southeast quarter of the northeast quarter of Section 30, a ten-acre tract, was covered with a deposit of gypsum approximately one acre in extent, and the gypsum analyzed 49.43 per cent pure gypsum, would that tract have any commercial value for the gypsum, on it, in your opinion?

A. No commercial value whatever.

The WITNESS.—(Continuing.) If the northwest quarter of the southwest quarter of the northeast quarter of Section 30 had on it a deposit of gypsum approximately two and one-half acres in extent, and the gypsum was of an average thickness of twenty inches over two and a half acres, and it analyzed 60.52 per cent pure gypsum, that tract would have no value commercially for the gypsum.

I have had active charge of the plant at Amboy over [694] eight years. I am not acquainted with James H. Colton. I know a man by the name of Montgomery who made an examination of our plant at Amboy and our deposit there some time ago for the Pacific Portland. I was not at the mine at all at the time he made the examination. I was at Amboy.

Q. You don't know to what extent he examined it?

A. Well, he made a superficial examination. I sent a man out with him.



(Testimony of D. A. Mulvane.)

The WITNESS.— (Continuing.) They were there a day and drove over the ground. The cost of the plant that is being operated at Amboy is pretty hard to approximate. It runs from seventy-five to a hundred thousand dollars, I should think. About 250,000 or 300,000 tons of 90 per cent and better gypsum has been developed at our plant at Amboy. That is a guess, but I will put it that way, 300,000 tons.

Cross-examination.

(By Mr. DUNNE.)

The WITNESS.—We do not derive the gypsum used in our Amboy plant from some neighboring deposit; we get it all at Amboy. The physical territory from which we take the gypsum is at Amboy, where our plant is.

Q. In plain English, you built your plant in the gypsum field?

A. We built it right at the station, and the field is just adjoining.

The WITNESS.— (Continuing.) The gypsum that we derive from that territory is crystalline in form. It is not gypsite. As it lies in place in the earth it runs about 80 per cent gypsum, and 20 per cent foreign matter; 80 to 85. Using it in our business as we do use it, it ran 94 per cent. We run some 92 and 98. [695]

Q. Now, then, how is the transition accomplished from 80 per cent gypsum in place to 94 per cent process gypsum, if I may so call it?

A. The process is crushing and running through



(Testimony of D. A. Mulvane.)

the dryer, screening, and also by an aspirator, and, of course, in doing so we have some waste. There is about one-third of the total tonnage that is waste, and in that is—what don't blow away—leaves a pile of 65 per cent stuff.

The WITNESS.—(Continuing.) We sell very little of the 65% stuff for land plaster, but we did. We get an accumulation of it. We are not promoting the sale of it for land plaster. We are discouraging it.

The process by which the gypsum used in the art at a rating of 94 per cent,—the process by which that gypsum is uplifted from the natural 80 per cent—is a mechanical process. We have spent money in our business seeking to purchase and facilitate such mechanical process. It is hard to state how much we have spent. I guess we have got about a hundred thousand dollars' worth of experience.

The use of gypsum has largely increased in the arts and manufactures within the last ten years.

#### Redirect Examination.

(By Mr. HALL.)

Q. What is the market value of that 65 per cent gypsum that you have thrown out as refuse?

A. We are selling to two firms at a dollar a ton, sacked.

Q. In your opinion, could gypsum running from 46 per cent pure to 75 per cent pure gypsum at a distance of twenty-five miles from the railroad, where it is only found in layers from 12 to 24 inches thick, and then only in areas of half an acre to five [696]

(Testimony of D. A. Mulvane.)

acres in extent, be worked profitably as a gypsum proposition?     A. They could not compete.

Q. They could not compete in the market?

A. No, sir.     [697]

**Testimony of T. A. English, for Plaintiff.**

T. A. ENGLISH, produced as a witness on behalf of plaintiff, being first duly sworn, testified as follows:

Direct Examination.

(By Mr. HALL.)

The WITNESS.—I reside at Los Angeles. My occupation is the gypsum business. I have been engaged in the gypsum business about twenty-six years, since 1890, in the United States. We are engaged in the gypsum business in substantially all of the gypsum-producing States, or most of them, from Virginia, taking in New York, Ohio, Michigan, Iowa, Oklahoma, Texas and Montana.

We have gypsum interests in the State of California. We have some interests in Riverside County, in the northeastern part of the county.

I have been engaged in the manufacturing and selling end of the gypsum business, and the last few years I have been in California searching for a good deposit for development. I have been out here for about nine years. During that time I have had occasion to examine deposits of gypsum in the San Joaquin Valley. I have examined a great many localities along the foothills on the east slope of the Coast Range mountains from a point known as Mendota to

(Testimony of T. A. English.)

the town below Midway, more or less all through that country, and also some in the southern part—the south and east of Bakersfield—and also on the opposite side of the Coast Range. I don't know how extensive the deposit is in miles and in area covered by the deposits in the country from Mendota to the Midway field. A distance, I should say, it must be a hundred and fifty miles or such a matter.

Q. That is, north and south. To what extent east and west?

A. It is not in a very wide range, but it was along the [698] foothills.

The WITNESS.—(Continuing.) In some places it may extend a mile or two. I couldn't answer as to how many deposits in that area I have examined personally to ascertain the value of the gypsum, but quite a number in different localities. There might be fifteen or twenty different localities, and perhaps more. I have been in there a great many times extending over a period of five or six years.

I have examined the deposits near McKittrick. I have examined the deposits near Taft, and some below Taft. Some of these deposits are pretty close to the railroad and some are quite a distance from the railroad.

I found no deposits at all in the vicinity of McKittrick or Taft that were of a commercial value.

Mr. DUNNE.—I don't want to interrupt the examination, but I don't want your Honor to assume by our silence that we consent to such speculative testimony as this being admissible. You may de-

(Testimony of T. A. English.)

scribe how much distance you discovered in this area—as to the extent and thickness of the deposit.

A. Well it is usually in the hills—in the rolling hills, and rather thinly scattered. Some places it is covered more or less, and in some places it is on the surface.

The WITNESS.—(Continuing.) Where it is covered, the overburden is usually soil mixed with rock in some places.

Q. Does that overburden add to or detract ordinarily from the value of these deposits of gypsum?

A. Well, it depends on the thickness of the overburden as to how much it would add to the expense of removing it.

Q. What is the usual per cent of purity that is required in the commercial world of gypsum? [699]

A. That would depend to some extent on the purpose for which it was used and what the impurities are.

Q. For the cement business or the making of Portland cement, what is the usual standard of purity required for gypsum in the trade?

A. I don't know as I can answer that direct. The purer the gypsum, of course, the more valuable it is. The impurities simply add to the cost of the material.

The WITNESS.—(Continuing.) Sand or gravel or silica or any foreign soil would naturally detract from the value of the gypsum for any purpose.

In making the usual ordinary wall plaster, there would not be any specific requirement as to purity required in the gypsum used in that branch of the

(Testimony of T. A. English.)

trade, except to this extent; the purer the gypsum the more sand-bearing capacity, and when it is pure gypsum or good gypsum it will carry in round figures two-thirds sand for plastering walls. And if there are impurities in the gypsum it simply reduces the sand-carrying capacity to that extent, and makes it more expensive and less valuable.

Q. What do you mean by sand-carrying capacity?

A. For plastering purposes they add to the material a certain percentage of sand, depending on the strength of the plaster. The purer the plaster is the stronger it is, and, consequently, the more sand it will carry.

Q. Can you tell me what per cent of gypsum as it is deposited in the earth is usually required and usually considered as being capable of being worked at a profit?

A. The rock formation will usually run 90 per cent or better. Gypsite sometimes is worked at a little lower percentage.

Q. What lower percentage? [700]

A. And a little more percentage of foreign matter. Perhaps ten or fifteen per cent and perhaps as high as twenty. But, of course, as I say, the greater the percentage of foreign matter the less value to the gypsum.

Q. Do you mean by your answer to say that the gypsite must be 80 per cent pure or better in order to be worked commercially at a profit?

A. I should say so, yes.

The WITNESS. — (Continuing.) Gypsum in



(Testimony of T. A. English.)

some places in the San Joaquin Valley that I have examined, runs to sand very heavy, and in certain earth—I don't know the technical name for it—there is more or less rock in some of it. The earth contains silica. The earth containing silica, rock and sand, detracts from the value of the gypsum.

Q. If the northwest quarter of the southeast quarter of the northeast quarter of Section 30, a ten-acre tract involved in this suit, contained a deposit of gypsite covering approximately two and a half acres, and that layer of gypsite is of an average thickness of 17 inches, and assays or analyzes 59.83 per cent pure gypsite, would that be such a deposit as in your opinion would be valuable for commercial purposes?

A. It would not.

Q. If the east half of the northeast quarter of the northeast quarter of Section 30 is covered to the extent of about one acre with a deposit of gypsite, analyzing or assaying 57.60 per cent pure, and is of an average thickness of 20 inches, would that in your opinion be such a deposit of gypsum as would add any value to the land for commercial purposes?

A. It would not.

The WITNESS.—(Continuing.) The distance from railroads very materially has to do with the value of deposits of gypsum. [701] Gypsum is a cheap commodity and it would make the cost of transportation too high.

The thickness of the deposit in Riverside varies. We have several veins there. That is gypsum rock; the pure crystals. We have several veins of that.

(Testimony of T. A. English.)

One will run about 25 feet in thickness and another about 12. It is a good rock gypsum. Some of it runs chemically pure. It will run from 98 to 99 per cent, and some can do better than that. At the present time that deposit is about a mile and a half from the railroad.

We have just completed that plant; just completed the railroad. I blocked out the gypsum, and up to a point where I had it in sight the way I blocked it out, about four million tons have been disclosed at this Riverside deposit. On this, of course, I had our engineer go over the ground, and he figured out a much larger quantity than I did. But I simply figured what I had actually blocked out. The actual acreage this material would cover would be very large. Perhaps—of course, it is difficult to say how many acres, but I should say that it would cover more than a hundred to a hundred and sixty acres, or somewhere along there.

In the handling of gypsum there is a difference between the deposit in the course of the handling. Which is the more expensive depends entirely on how the material lies. Sometimes it may be more expensive to take out one, and may be more expensive to take out the other. It depends on how the deposit lies. [702]

### **Testimony of Silas S. Gillan, for Plaintiff.**

SILAS S. GILLAN, produced as a witness on behalf of plaintiff, being first duly sworn, testified as follows:

(Testimony of Silas S. Gillan.)

Direct Examination.

(By Mr. HALL.)

The WITNESS.—My occupation is that of mining engineer. I am a graduate of the Minnesota School of Mines, University of Minnesota. I graduated in June, 1907. Since that time I have been practicing my profession as a mining engineer.

I have been engaged in the practice of my profession chiefly in the southwest, in California, Arizona, New Mexico, Oklahoma, Arkansas.

I have been engaged in the examination of oil properties. I have worked at that in California chiefly, and a little work in Wyoming. I have been engaged in California in examining oil property since the early part of the year 1911. Practically, my work has consisted of making examinations to determine the mineral or nonmineral character of lands, investigating applications for patent, and making reports to the Commissioner of the General Land Office. In the course of my work I have had occasion to make examinations of oil wells that are producing oil. I have had occasion to examine oil wells to ascertain whether or not they were making water or producing water as well as oil. During my examinations since the early part of 1911 I have been making examinations of that character.

Q. About how frequently did you make such examinations?

A. I presume that one-third of my time has been spent in the oil fields.

The WITNESS.—(Continuing.) I recently ex-

(Testimony of Silas S. Gillan.)

amined the northeast quarter of section 30 in township 26 south, range 21 east, in Kern County, California.

I am employed as Mineral Inspector for the General Land [703] Office. I have been employed as such since February, 1910.

I examined the northeast quarter of section 30, township 26 south, range 21 east, on August 10, 1916. I found oil wells on that property that were producing oil. I found twelve wells in that quarter section producing oil. I made an examination of those wells to ascertain whether or not they were producing water.

Q. Please describe in your own way each one of the wells, as to the operations of it, and what it was producing.

A. I will refer to the wells by the numbers. In the wells known as Devil's Den Numbers 1, 2, 3 and so forth, each well—

Q. (By Mr. DUNNE.) Are you testifying from a memorandum now?

A. I am referring to it now.

The WITNESS.—(Continuing.) It is a notebook that I made notes in at the time of my examination of the land in question. I had the book in the field and made the notes at the time I made my observations.

Number 1 well was being pumped. The production consisted of oil and water and was being pumped to a cone tank.

Q. Did you make any estimate as to what per cent

(Testimony of Silas S. Gillan.)

was oil and what was water?

A. It would be merely a guess. It was making a substantial quantity of water that was plainly visible. If I attempted to state the amount it would be nothing much better than a guess.

The WITNESS.—(Continuing.) Number 2 well was making a considerable quantity of water with the oil and was also being pumped. Number 3 well was also making a considerable quantity of water and oil. It was being pumped. Number 4 well was also making oil and water. It was being pumped. Number 5 well was making oil and water. It was also being pumped. Number 6 well was pumping [704] oil and water. Number 7 well was also pumping oil and water. Number 8 well was pumped into a pipe-line, and I did not ascertain whether it was making water or not. Number 9 well was pumping oil and water. Number 10 well was pumping oil and water. Number 11 well was pumping oil and water. Number 12 well was not producing; the rig was in ruins. Number 13 was being pumped; it was making oil and water

From my examination of the wells on this property I could not ascertain from what source this water was coming. I did not have facilities at hand to make such examination; it would be a lengthy test, necessitating going into the well with tools, and a knowledge of the log of the well, and I made no such examination as that.

The sources of water that are met in an oil well may come from a stratum above or below the oil



(Testimony of Silas S. Gillan.)

sand, or it may come into the oil sand from down the slope. There is a way of shutting off the water that comes from above or below the oil sand. That water is taken care of in drilling a well. It is shut off—either cased off or cemented off in drilling a well. In my opinion, the proper and safe way to take care of that water situation in drilling a well is to shut it off.

Q. Is the water that comes up the slope of the oil sand from which the oil is being produced, capable of being shut off?

A. I don't know about that. I don't think it is.

Q. If the wells which I have examined on the Northeast of 20 are making this water from a water sand above or below the oil stratum, should that water, in your opinion, be shut off in order to conserve the oil that is in the oil sand?

A. Yes, sir.

The WITNESS.—(Continuing.) I examined the wells on the [705] northwest quarter of Section 30, 26-21. I made that examination on August 10, 1916.

Q. Tell the Court the result of your examination and what you observed there.

A. I found three wells on the northwest quarter of Section 30. These wells are known as the Universal Number 1, Number 5 and Number 12. Number 1 well was being pumped. The production was oil and water. Men were at work on Number 12 well and it appeared to have recently been a producer. It was not producing at the time I was there, how-

(Testimony of Silas S. Gillan.)

ever. Number 5 well was not producing. It was standing idle and it was partially dismantled. I met a man at this well who claimed to be the foreman on this lease, and he said—

The WITNESS.—(Continuing.) I examined the southeast quarter of Section 30, which is involved in suit A-52, on August 10, 1916.

Q. (By the COURT.) How many wells did you find?

A. Five wells producing oil. The well known as Number 4 well of the Universal Oil Company was being pumped. It was producing oil and water. Number 9 well was being pumped and it also was producing oil and water. Number 10 well was being pumped. I did not observe any water in the production of Number 10 well. Number 11 well was being pumped. It was making oil and water. Number 13 well was being pumped and it was also making oil and water.

(Mr. Hall resumes direct examination.)

The WITNESS.—(Continuing.) Those were all the wells on the southeast. There were two abandoned wells on that known as Number 2 and Number 8.

Q. Did they show any evidence of ever having been producing [706] wells?

A. I could not say.

The WITNESS.—(Continuing.) I examined the wells on the northeast quarter of Section 32, 26-21, involved in suit Number A-52.

Q. When was that examination made, and describe

(Testimony of Silas S. Gillan.)

the observations that you made.

A. I examined the northeast quarter of Section 32, 26-21, on August 10, 1916. On the East half of the northeast quarter, known as the Prestage lease, the rigs were gone. They were not producing wells. On the West half of the northeast quarter of Section 32 I found six wells producing oil. These wells were known as the Universal Numbers 1 and so forth. Number 1 well was being pumped and was making water and oil. Number 8 well was being pumped and it was also making water and oil. Number 21 well was being pumped and making oil and water. Number 6 well was being pumped and making a large quantity of water and oil. Number 29 well was being pumped and making oil and water.

The WITNESS.—(Continuing.) I examined the northwest quarter of Section 32 involved in suit Number A-52 on August 10, 1916.

Q. Describe what you found in the way of producing wells, and what they were producing.

A. On the northwest quarter of Section 32, 26 South, 21 East, I found nine wells that were producing. These wells were known as the Universal Numbers 11 and 12 and so forth. Number 11 well was being pumped and was making water and oil. Number 12 was flowing. It was also making water and oil. Number 24 well was being pumped and it was making water and oil. Number 25 well was equipped for pumping. It apparently was flowing. The reason I say that is that gas was escaping right around the head of the [707] casing, and the stuff

(Testimony of Silas S. Gillan.)

ran off from here. I didn't follow that up to see where it went to.

Q. Was that escaping above the casing?

A. There was just a leakage around the casing head, enough to demonstrate that the well was possibly a flowing well. Number 28 was a flowing well but making mostly water and a little oil accompanied the water. It was flowing under a pretty good pressure. The pressure-gauge registered 180 pounds. This makes a very large production, although I say it was mostly water. Number 31 well was being pumped and was making water and oil. Number 32 well was being pumped and was making oil and I think no water. I don't be sure without a more careful test. Number 33 well was being pumped and was making water and oil. Number 34 well was flowing and it was making a small amount of water and oil. That is all on the northwest quarter.

The WITNESS.—(Continuing.) I examined the southwest quarter of Section 32, 26 south, range 21 east on August 10, 1916, and found one well on it producing. This well is known as Number 9 well of the Universal Oil Company. It was being pumped and apparently was making no water, although without a careful test I would not be prepared to say.

Q. Was that the only well on the quarter?

A. There was a water well known as Number 1 well.

Q. That was making no oil at all?

A. I presume not. It was furnishing the water

(Testimony of Silas S. Gillan.)

supply and I did not note the production from that well.

Q. Did you make any observations to ascertain what was being done with the oil that was being taken out of these various wells or on the lands involved in A-37 and A-52?

A. Nothing further than to note that it went into a pipe-line. [708]

The WITNESS.—(Continuing.) I do not know whether that pipe-line ran off of the property in question. I made an investigation of the southwest quarter of 18, township 26 south, range 21 east—

The COURT.—These are all in the same township?

A. Yes. On August 5, 1916. I found one well on it. The well was idle. No one was operating it. It was not being pumped and no one was at work there. The well was completely equipped for pumping. In a 50-barrel tank alongside of the well I noticed oil and water. That is, the tank was about half full. And there were two small sump holes alongside of the well that had a small amount of oil in them.

The WITNESS.—(Continuing.) There was no oil or gas escaping from that well. Apparently it had not been shut off or plugged.

Q. What examination did you make to ascertain whether or not it had been?

A. I noticed the equipment on the surface. It was equipped with tubing and a pump all rigged up, apparently ready to pump.



(Testimony of Silas S. Gillan.)

The WITNESS.—(Continuing.) I did not notice any indications of the well making any water. There were no other wells in the southwest quarter of 18.

Q. Were your observations with respect to the making of water in these other wells—were they the same as the other wells that you described on the northeast quarter of section 30? Were you capable of telling from what source the wells that were making water were producing the water? A. No, sir.

The WITNESS.—(Continuing.) The same observations in [709] regard to the wells on the northeast of 30 apply in regard to where the wells were making water.

On the dates mentioned, August 5 and 10, were the only times that I made a specific examination of the lands involved in these three suits. I had been over the Lost Hills a number of times before.

Q. On the dates of your visits there did you make any observations with regard to ascertaining whether or not gypsum was being mined or shipped from there?

A. I never saw any gypsum being mined or shipped at all.

Q. Did you see any evidence of an attempt to mine or remove gypsum from the property?

A. I noticed a shallow excavation from which gypsum had been taken out and sacked up and the sacks piled. It evidently had been some time ago, because a number of the sacks were rotted through and the gypsum spilled out.

(Testimony of Silas S. Gillan.)

The WITNESS.—(Continuing.) I did not make an examination to ascertain the extent and area of these deposits of gypsum on these lands here, except to note in a general way. I noticed that in passing.

I did not see any machinery or plant for the purpose of treating the gypsum.

Mr. HALL.—The plaintiff desires to offer and read in evidence the following extract from the Minute Book of the Devil's Den Consolidated Oil Company, in suit A-37, and I read from Volume 2 the portion of the minutes of a meeting commencing on page 142, and the heading is, "Office of the Devil's Den Consolidated Oil Company, Visalia, California, April 13, 1907."

The first paragraph of the proceedings on page 142 is as [710] follows:

"The adjourned meeting of the Board of Directors of the Devil's Den Consolidated Oil Company met at the appointed time in the office of W. B. Wallace, at ten o'clock A. M., April 13, 1907.

Present, W. B. Wallace, J. N. Hoyt and I. T. Bell.

Absent, William Lindeman, J. J. White, J. E. Ennis and Robert Kuerzel.

There being no quorum, the meeting adjourned until 1:30 P. M. of this day.

At 1:30 P. M. the Board met pursuant to adjournment.

Present, W. B. Wallace, J. N. Hoyt, J. E. Ennis and I. T. Bell. William Lindeman appeared before the Board adjourned.

The Secretary of the Board being absent, the

President of this Board appointed I. T. Bell Secretary *pro tem*.

The following proceedings were had, to wit:”

Then I skip over on to page 143, and, commencing with the second paragraph thereon, I read as follows:

“On motion it was ordered that the president of this Board be authorized to instruct the agent of this Company (O. D. Barton) to use some of the old lumber and wire on the lands of this company for the purpose of erecting a cabin and other improvements on the land recently located for this company in the Lost Hills.

There being no further business, on motion, the meeting adjourned.

(Signed) I. T. BELL,  
Secretary *pro tem*. [711]

Mr. REDDING.—If the Court please, in addition to the objections which stand regarding this, the president of the company was W. B. Wallace. That is Superior Judge Wallace of Visalia. He had had some serious illness, I believe, which makes him more or less an invalid. It will become necessary for us either to get him here or to take his deposition with reference to these proceedings, and I would have to give notice that if we cannot get his presence owing to his condition, that he may have an opportunity of taking his deposition without delay in Visalia. [712]

San Francisco, California, August 24, 1916,  
10 o'clock A. M.

Mr. HALL.—Last night I announced that the

Government would possibly offer a witness in regard to some Land Office matters, but, after consultation, it has been determined not to do that. The Government is about through with its case, with the exception of those matters that we called upon the defendant for.

Mr. REDDING.—Mr. Morton, the Secretary, will be here in a moment. He is on his way up.

Mr. HALL.—May the record also show that in support of the Government's application for the appointment of a receiver and a temporary restraining order in all three cases, 37, 52 and 57, that the Government offers as part of its proof the three verified complaints, or, rather, the verified complaint in 37 and 57, and the amended verified complaint in 52?

The COURT.—Yes.

Mr. REDDING.—If the Court please, the Government has requested a detailed statement of the output of the Lost Hills properties. That would take a long period of time for the Secretary to compile, and, being during the summer months and the close of the vacation, he has not had an opportunity to do that and check it up. We are willing to stipulate that upon the lands involved in the Lost Hills case, namely: the northwest quarter of 30 and the southeast quarter of 30, the northeast of 32, and the northwest of 32, and the southwest of 32, they are producing oil today and have been for a long period of time, upwards of between twenty and twenty-five thousand barrels a month, roughly speaking. Of course, the Government at this time is not calling

for an accounting. [713] I understand Mr. Hall wants some statement sufficient for your Honor to be aware that there is a large quantity of oil being taken and has been taken covering a period of years off of this property. We are willing to stipulate, if that is sufficient for the present proceedings.

Mr. HALL.—And under our present stipulation under which the money is impounded, I believe you make monthly reports to the receiver Mr. Payne, do you not?

Mr. REDDING.—That is true in A-37; but the stipulation in A-52 regarding the moneys is that we are keeping it on deposit pending the proceedings, subject at any time to an inspection, if you wish to verify the reports of the Secretary. I don't think we have any stipulation in 52, with reference to a receiver. That is not involved in that case. We agreed to keep the moneys intact and not dispose of them except as far as the expenses of running the corporation is concerned pending these proceedings.

Mr. DUNNE.—Will you be good enough to make that statement again with respect to A-37?

Mr. REDDING.—I am not speaking of A-37.

Mr. DUNNE.—I understood you to say that there was a report made to Mr. Payne, the receiver.

Mr. HALL.—In the other cases.

Mr. REDDING.—In A-37 there was a stipulation entered into last October by which the moneys received from the sale of the oils were deposited, I think, with the Crocker National Bank, in escrow, or in trusteeship, pending the outcome of these proceedings. I do not recall the exact terms of the



stipulation, but I think they cover some reference to the right of Mr. Payne to inspect—or the Government to inspect—the monthly reports. The stipulation with reference to A-52, the Lost Hills case, is simply [714] that we will keep the moneys intact in the Crocker Bank and not dispose of them pending this application for a receivership, and there is no reference to any receiver in anywise, but there is a stipulation that the Government at any time can come and inspect the receipts, and, if not satisfied, they can apply to the Court for further information. I think that is the burden of that stipulation.

Mr. HALL.—I was just looking for it.

Mr. DUNNE.—I was a little troubled by the reference to the receiver in the Devil's Den stipulation. I understand, your Honor, that Mr. Payne has been appointed receiver in some of these cases; that we are keeping the moneys in the Devil's Den case in the custody of the Crocker National Bank, and that the receiver in these other cases has been named as a convenient person to represent the Government to see that we are properly impounding these moneys, but that he has no status of a receiver in the Devil's Den case.

Mr. HALL.—I was not intending to imply that. Here is the stipulation. (Reads said stipulation.)

Mr. REDDING.—That carries out my statement.

Mr. DUNNE.—That is as to the Lost Hills.

Mr. REDDING.—Now, if you will get the Devil's Den stipulation and see the variation in that.

Mr. DUNNE.—I wish my client had a more angelic name, your Honor.

Mr. HALL.—It might be better to substitute the name “Gypsum” or “Oil” in that name, too. (Reads said stipulation.)

Now, that stipulation of September 17, 1915, is as follows: (Reads said stipulation.)

Now, the statement that I have of the production of the oil from the Devil’s Den Consolidated, under that stipulation [715] of September 17, 1915, is here. This is the copy that we received from the Secretary of the Company, and we desire to offer that in evidence.

The COURT.—That is in—

Mr. HALL.—A-37.

(Said statement is in words and figures following:) [716]



## DEVILS DEN CONSOLIDATED OIL COMPANY

## Oil Statement

Total Period to September 17-1915

On Hand 1st of Mo	Bbls Produced	Total Stock	Bbls. Sold To Universal	Per Bbl	Amount
Jan. 1912	5,776.58		5,776.58	30¢	1,732.97
Feb. "	5,098.63		5,098.63	30¢	1,529.59
Mar. "	5,505.64		2,752.82	30¢	2,202.25
Apr. "	4,182.32		4,182.32	50¢	2,091.16
May "	9,031.86		5,059.40	40¢	4,009.99
June "	8,554.36		5,972.46	50¢	
July "	8,667.52		8,554.36	40¢	3,421.74
Aug. "	7,546.86		8,667.52	40¢	3,467.00
Sept. "	13,417.10		7,546.86	40¢	3,018.74
Oct. "	17,665.80		13,417.10	40¢	5,366.84
Nov. "	18,978.03		17,665.80	40¢	7,066.32
Dec. "	27,376.33		18,978.03	40¢	7,591.21
1913	26,430.33	26,430.33	26,999.28	40¢	10,799.71
"	269.39	23,790.92	25,893.94	40¢	10,357.58
"	505.77	23,790.92	21,430.52	50¢	11,465.62
"	437.05	32,366.09	1,875.89	40¢	
"	404.64	32,366.09	32,210.13	40¢	12,884.05
"	531.97	35,638.44	35,400.53	40¢	14,160.21
"	871.48	40,268.85	39,988.52	40¢	15,995.40
"	881.50	43,017.17	42,477.66	40¢	16,991.06
"	426.17	46,280.97	45,961.33	34¢	15,626.85
"	777.10	49,411.51	49,866.84	34¢	16,954.72
"	777.72	46,979.75	180.15	34¢	14,007.26
"	777.88	44,828.77	46,486.67	30¢	
"	777.95	45,145.88	42,691.57	34¢	14,515.13
"	777.21	45,030.65	44,740.40	34¢	15,211.74
"	777.62	49,140.99	43,184.49	34¢	14,682.73
"	777.95	42,242.63	42,021.66	37¢	15,548.01
"	777.21	44,031.01	46,585.43	37¢	17,236.61
"	777.70	39,799.13	42,360.74	37¢	15,673.47
"	777.70	40,382.70	45,340.74	37¢	16,776.07
"	777.70	39,439.93	35,437.80	37¢	13,111.99
"	777.70	43,452.20	37,106.81	37¢	13,729.52
"	777.70	44,425.82	37,966.76	37¢	14,047.70
"	777.70	39,999.90	38,131.50	37¢	14,108.66
"	777.70	45,850.60	37,529.97	37¢	13,886.09
"	777.70	41,477.37	38,365.61	37¢	14,195.28
"	777.70	42,628.01	40,072.00	37¢	14,826.64
"	777.70	42,657.08	36,505.68	37¢	13,507.10
"	777.70	34,367.42	37,725.15	37¢	13,958.31
"	777.70	58,902.04	31,599.24	37¢	11,691.72
"	777.70	59,614.33	30,226.04	37¢	11,183.63
"	777.70	36,492.22	35,595.04	37¢	13,170.16
"	777.70	36,979.13	34,945.41	37¢	12,929.80
"	777.70	37,100.50	35,192.50	37¢	13,021.23
"	777.70	7,313.64	32,587.20	37¢	12,057.26
"	777.70	9,718.20	33,567.10	37¢	12,419.83
"	777.70	84.81	20,354.66	37¢	7,531.22
			1,373,034.66		\$309,740.17

## DEVILS DEN CONSOLIDATED OIL COMPANY

## Oil Statement

Total Period to September 17-1915

Bbls Sold Standard	Per Bbl	Amount	Bbls Used Per Fuel Bbl	Per Bbl	Amount	Total Bbls Sold & Used	Amount Received	Sale ON H. No.
						5,776.58	1,732.97	
						5,098.63	1,529.59	
						5,505.64	2,202.25	
						4,182.32	2,091.16	
						9,031.86	4,009.99	
						8,554.36	3,421.74	
						8,667.52	3,467.00	
						7,546.86	3,018.74	
						13,417.10	5,366.84	
						17,665.80	7,066.32	
						18,978.03	7,591.21	
						27,376.33	10,988.24	
			377.05	50¢	188.53	26,160.94	10,397.63	
			267.00	15¢	40.05	23,554.54	11,502.83	
			248.13	15¢	37.21	32,434.81	12,917.75	
			224.68	15¢	33.70	35,685.85	14,160.21	
			285.35			40,268.85	15,995.40	
			138.00			42,677.66	17,021.06	
			200.00	15¢	30.00	46,280.97	15,673.29	
			309.62	15¢	46.44	49,866.84	16,954.72	
						46,666.82	14,007.26	
						44,828.77	14,548.64	
			98.58	34¢	33.51	44,987.72	15,295.85	
			247.32	34¢	84.08	43,349.91	14,738.97	
			165.42	34¢	56.24	42,021.66	15,548.01	
			107.94	35¢	37.78	46,693.37	17,274.37	
			264.72	35¢	92.66	42,625.46	15,766.11	
			243.78	35¢	85.32	45,584.52	16,861.91	
			297.09	37¢	109.92	35,734.89	13,211.91	
			241.70	37¢	89.43	37,348.51	13,811.91	
			318.00	37¢	117.66	38,284.76	14,165.51	
			273.34	37¢	101.14	43,191.58	16,124.71	
			330.00	37¢	122.10	44,666.12	15,911.41	
			364.50	37¢	134.87	43,662.16	16,124.71	
			364.96	37¢	135.04	45,113.46	16,812.26	
			376.46	37¢	139.29	41,746.69	15,548.01	
			459.80	37¢	178.13	43,250.87	16,124.71	
			633.40	37¢	234.36	37,182.87	13,958.31	
			5,050.33	40¢	2,020.13	5,050.33	2,020.13	
			4,781.80	40¢	1,912.72	598.70	221.52	
			5,090.82	40¢	2,036.33	676.84	250.43	
			4,950.80	40¢	1,980.32	470.12	173.94	
			3,304.93	40¢	1,321.97	379.72	140.50	
			2,985.53	40¢	1,194.21	128.36	47.49	
						9694.85	\$3176.93	
						1,442,970.22	307,031.41	





The COURT.—About what is the output, roughly speaking?

Mr. HALL.—For the month of September, 1915, 20,354.66; the total amount that has been produced up to September, 1915, was 1,373,029.66 barrels of oil.

The COURT.—1915?

Mr. HALL.—Up to September, 1915, the total amount of oil that had been produced from the north-east quarter of Section 30 and delivered by the Devil's Den Consolidated Oil Company to the Universal Oil Company under its contract was 1,373,029.66 barrels. The total production for that period was 1,446,984.81 barrels.

The COURT.—For how long a period?

Mr. HALL.—Commencing January, 1912, and ending September, 1915.

The COURT.—That is four years and three months.

Mr. HALL.—In January, 1915, there were forty-two thousand barrels and over; February, 34,367; March, 38,902; April, 1915, 39,614; May, 38,492; June, 36,979; July, 37,100; August, 37,313; September 19,718. Some of the first years, 1912, for instance, there was 5,776.

The COURT.—From twenty-five to thirty-five thousand average?

Mr. HALL.—Yes; somewhere between those figures. Your Honor understands that that is solely for the Devil's Den quarter-section?

The COURT.—Yes.

Mr. REDDING.—In A-52, the Lost Hills case,

the statement [717] I have given, I think, is satisfactory to the Government—that they are producing about twenty thousand barrels a month.

Mr. HALL.—I don't know whether it is—

Mr. REDDING.—The Secretary will be here in a moment. I asked him and he gave me those figures. At any rate, that is sufficient to inform the Court as to the average production. It runs about twenty thousand to twenty-five thousand barrels a month.

Mr. HALL.—That is all the Government has, except the statement of the financial condition which we expect to get from Mr. Morton when he arrives, and I would like to have an opportunity before I put him on the witness-stand to inquire about that. I have not been able to see him or talk to him. With that exception it is all the evidence the Government has. [718]

Mr. McWILLIAMS.—The defendant, the Devil's Den Consolidated Oil Company, A-37, offers and reads in evidence its amended answer, verified on the 25th of June, 1916, before R. B. Treat, Notary Public, in and for the city and county of San Francisco.

(Whereupon Mr. McWilliams reads said amended answer, which is as follows:) [719]

Mr. McWILLIAMS.—I now offer, and the exhibits may be deemed to be read in evidence.

Mr. HALL.—What are they?

Mr. McWILLIAMS.—The charges filed by the representatives of the Land Office, together with the answers of this defendant.

Mr. HALL.—Those are the specific charges of September, 1915?

Mr. McWILLIAMS.—Yes, the charges of September, 1915, together with the answers.

(The charges above referred to and the answer thereto are annexed as exhibits to the Answer of the Devil's Den Consolidated Oil Co. in case A-37, Equity.) [720]

Mr. McWILLIAMS.—I now offer and read in evidence the affidavits, first, of Mr. Wallace, and then of the other original locators of the mining claim involved in suit, and your Honor will note that these affidavits were executed for the purpose of refuting and controverting the contention of the Government that the location was made for and on behalf of the Devil's Den Company.

The COURT.—You are referring now alone to the Devil's Den case?

Mr. McWILLIAMS.—Yes; I am restricting myself to that.

Mr. HALL.—I have not received a copy. I must protest, your Honor. I have given them copies of my evidence as soon as they were received. I have not received any on their part. There has been none filed until 10:20 this morning, and here they come in with others.

Mr. McWILLIAMS.—We were not served with the depositions read yesterday or the evidence taken by the plaintiff.

Mr. HALL.—Under the agreement with Mr. Redding when this matter came up first, I asked if you wanted me to serve him with those depositions. He

has copies in the office. I asked if he wanted me to serve other copies, and he said no.

Mr. REDDING.—I will recall Mr. Hall's mind to a stipulation that we had, in view of the multitude of material we might have to introduce and the difficulty of getting it, that we would waive the five days' notice. And if we produce affidavits and take the other parties by surprise, they would have an opportunity to file counter-affidavits.

Mr. HALL.—That was made with respect to the hearing on the 26th, and not this hearing. May I look and see the dates of these?

Mr. McWILLIAMS.—A very material part of the plaintiff's [721] evidence was offered by witnesses.

The COURT.—It would be a proper thing to serve affidavits beforehand.

Mr. McWILLIAMS.—We have not any objection to counsel being allowed a reasonable time to read them over.

Mr. HALL.—That is a question of delay again. Here are affidavits made by men in San Francisco yesterday. Here is one sworn to on the 22d of June, 1916, served on me this morning. I do not consider that I am bound by any stipulation waiving the five days' time when they had this affidavit in their possession. It is not fair to counsel for the Government.

Mr. McWILLIAMS.—I looked through the Rules and I was unable to find any rule dealing with this subject and requiring that affidavits be served in advance, and I thought it was in pursuance of the

absence of such a rule that counsel themselves had not made the showing in advance of the hearing, in so far as the witnesses who have testified are concerned.

The COURT.—Don't the rules of court require service of affidavits?

Mr. HALL.—Five days before.

Mr. McWILLIAMS.—What is the rule? I know I attempted to locate such a rule and was unable to do so.

Mr. HALL.—I think it is a general rule in this Circuit.

Mr. McWILLIAMS.—I went through the Circuit Court rules.

Mr. JUSTICE.—When they bring a witness they have an opportunity to cross-examine the witness. The witness may not be willing to give an affidavit, and, therefore, we have to bring him. But they come in here with affidavits this morning sworn to last June.

The COURT.—I understand the rule in the Southern District [722] requires them to be served five days before the hearing.

Mr. PIER.—In that matter we inquired explicitly of Mr. Van Dyke, the clerk of the court, if there was such a rule, and he informed us that there was no such rule.

Mr. McWILLIAMS.—And I not only looked carefully through the rules, but ran down the decisions to see if I could find something dealing with the subject of service of affidavits, and found nothing. You will also note that in the notice served



on us we were told that plaintiff would apply for a receiver and for an injunction, and no reference was made to the nature of the testimony relied on. So, when we came here we had one or two affidavits served in advance, and had no idea whether any other showing would be made, either by affidavits or oral testimony.

Mr. DUNNE.—Have you the notice there?

Mr. McWILLIAMS.—Yes, I call attention to the language of the notice in the Devil's Den case:

“To Devil's Den Consolidated Oil Company, Associated Oil Company and Standard Oil Company:

“You, and each of you, are notified that on Monday, the 20th day of September, 1915, at 10 o'clock A. M., in the United States District Court Room in the City of Los Angeles, before his Honor, Benjamin F. Bledsoe, United States District Judge, the plaintiff will apply to the Court for the appointment of a receiver to take charge of the northeast quarter of Section Thirty in Township Twenty-six South, Range Twenty-one East, Mount Diablo Base and Meridian; and of all the property of every kind and nature situated thereon, particularly of the oil, machinery, pipes, and other property used or the use of which is or has been contemplated in the drilling or operation of oil and gas wells for the production of oil on said land; and of all the oil, wherever [723] situated, produced on said land, and of the money for which any of the oil or gas produced from said land was sold; and further, that an injunction will be asked by the plaintiff against

the further operation of the same by either of the defendants, except as allowed by and under the direction of a receiver hereafter to be appointed.

This 16th day of September, 1915."

Mr. DUNNE.—Is that the entire notice?

Mr. McWILLIAMS.—Yes; signed by E. J. Justice.

Mr. HALL.—I desire to call your Honor's attention to a notice which was served on the Devil's Den Consolidated Oil Company by the Deputy Marshal of the United States on June 10, 1916, and the last paragraph is as follows:

"The above motions will be submitted upon the verified bill of complaint herein, affidavits, records, documents and oral testimony."

The COURT.—But there was no affidavit accompanying the motion?

Mr. HALL.—No.

The COURT.—That is not the practice I am familiar with. I don't know what it is in this District. Our practice is that they should have prepared the affidavits and served them at the time of the motion.

Mr. DUNNE.—That is the only practice I am aware of.

The COURT.—Under the circumstances, I will let counsel read his evidence. And if the Government wants an opportunity to meet it, I will allow it.

Mr. HALL.—I want to serve notice right now in open court that before this matter is finally determined I want to produce a witness to contradict this affidavit of W. B. Wallace. [724]

Mr. McWILLIAMS.—We will reach that in due course. The first affidavit is by W. B. Wallace.

The COURT.—When was that affidavit made?

Mr. McWILLIAMS.—That was made at the time the application was originally made for a receiver, on the 2d of October, 1915, before D. E. Perkins, Notary Public in and for the County of Tulare, California.

Mr. HALL.—Counsel for the Government have not yet received a copy of that.

(Mr. McWilliams begins the reading of the affidavit of W. B. Wallace.)

Mr. HALL.—I hate to be insistent, but while this is being read I certainly think that even common courtesy—

Mr. McWILLIAMS.—I handed them to you.

Mr. HALL.—They are attached to your papers. I am not going to take them out of your papers.

Mr. DUNNE.—I suggest that you extract the affidavit of Judge Wallace and present it with all ceremony.

Mr. McWILLIAMS.—I beg Mr. Hall's pardon.

(Mr. McWilliams reads the affidavit of W. B. Wallace.) [725]

**Defendants' Exhibit "B" (Case No. A-37)—  
Affidavit of W. B. Wallace.**

State of California,  
County of Tulare,—ss.

W. B. Wallace, being first duly sworn, deposes and says: That I now am and for more than sixteen years last past have been Judge of the Superior Court

of the county of Tulare, State of California; that I have been practicing law since the year 1881; that during much of my lifetime I have been interested in mines and in the mining business; that by reason of such interest I have paid particular attention to the subject of mining law and deem myself familiar with the principles of mining law and with the requirements of the Government pertaining to the location of mining claims.

That in or about the month of January or the early part of February, 1907, I was asked by one O. D. Barton whether I would care to have certain mining locations in the Lost Hills Section in Kern County, California, made for me by him. Knowing the familiarity of Mr. Barton with the geology of that section I agreed thereto and thereafter the said O. D. Barton informed me that he had located several mining claims, among which claims was the Consolidated Placer Mining Claim covering the northeast quarter of Section thirty (30) township twenty-six (26) south, range twenty-one (21) east, M. D. B. & M., and had inserted my name in the notice of location as one of the locators thereof; that I agreed to and acquiesced in such location in my name and paid Mr. Barton the charge which he made for his services; that thereafter and prior to the 30th day of May, 1907, the suggestion was made to me by one or more of the stockholders of the Devil's Den Consolidated Oil Company, who were likewise named as locators of the said northeast quarter of Section thirty (30) township twenty-six (26) south, range twenty-one (21) east, M. D. B. & M., that by reason of the fact

that we were all stockholders in the [726] Devil's Den Consolidated Oil Company, it would be to our interest to convey the said Consolidated Placer Mining Claim to that company by reason of the fact that the corporation could carry on the assessment work required by law and develop the claim to a better advantage than could we working individually; that I agreed thereto, and shortly thereafter I, together with the other locators named in said location notice executed a deed of the said mining claim to the said Devil's Den Consolidated Oil Company.

That prior to being notified by Mr. Barton that he had located the said mining claim neither myself nor any of the other said locators as I am informed and believe and therefore allege the fact to be, had made any arrangement whatever with the said Devil's Den Consolidated Oil Company or any one representing it to convey the said mining claim to the said company; that had such a suggestion been made by the said Devil's Den Consolidated Oil Company, or by anyone representing it, or by any of my colocators, I would have objected thereto by reason of the fact that I was of the opinion and belief that it was improper and illegal for a corporation to locate or to cause to be located for its benefit a placer mining claim in excess of twenty acres; that it is not true that myself and my colocators of the said mining claim were not *bona fide* locators thereof; that it is not true that myself and my colocators were mere dummies employed or requested by the said Devil's Den Consolidated Oil Company to make the location of the said mining claim in its behalf or to thereafter con-



vey the said mining claim to the said corporation.

(Signed) W. B. WALLACE.

Subscribed and sworn to before me this 13th day of October, 1915.

(Signed) D. E. PERKINS,

Notary Public in and for the County of Tulare, State of California. [727]

Mr. McWILLIAMS.—Thereafter Judge Wallace's attention was brought to the fact that he had in a letter written, I believe, to a representative of the United States, made a statement that would appear to be inconsistent with the facts set out in this affidavit, and in order that the Court may be apprised of all the facts in connection with this matter, I now ask that the Government produce that letter in order that we may read it in evidence.

Mr. HALL.—I am glad they call for that. That letter was induced by the letter from Special Agent C. D. Hamel. Mr. Hamel has that original letter in his possession. Not knowing that such an affidavit would be presented in this case, although it was taken and was apparently in the possession of counsel since October 13, 1915, Mr. Hamel was permitted to depart the State. He is now either in New York or in the District of Columbia, on Government business. I mailed to Mr. Wallace a copy of the letter at his request some three or four months ago. If counsel have not a copy here I will furnish a copy of my copy. I won't guarantee that it is a copy of the original.

Mr. McWILLIAMS.—I now offer the second affidavit just referred to, and I now also serve upon Mr. Hall a copy of that affidavit.

(This affidavit is again referred to at Tr. 238 [Record, p. 1023]. Whereupon it was read in evidence by counsel at that point.) [728]

Mr. McWILLIAMS.—I now offer and read in evidence the affidavit of L. C. Hyde, subscribed and sworn to before D. E. Perkins, on the 13th of October, 1915.

Mr. HALL.—The same objection. It was apparently in the possession of counsel since the 13th of October, 1915, and *eo* copy served on us.

Mr. DUNNE.—It is understood that this objection pertains to all the affidavits without unnecessarily and acrimoniously interrupting the record.

(Thereupon Mr. McWilliams read the affidavit of L. C. Hyde, which is as follows:) [729]

**Defendants' Exhibit "C" (Case No. A-37)—Affidavit  
of L. C. Hyde.**

State of California,  
County of Tulare,—ss.

L. C. Hyde, being first duly sworn, deposes and says: That he is now and for more than twenty-five years last past has been a resident of the city of Visalia, in said county of Tulare, State of California; that he is cashier of the National Bank of Visalia; that he is one of the locators named in the notice of location of the Consolidated Placer Mining Claim, embracing the northeast quarter of Section thirty (30), township twenty-six (26) south, range twenty-one (21) east, M. D. M., which said notice of location was recorded on February 23, 1907, in Book 40 of Mining Records, at page 286, Kern County

Records; that at and prior to the date of said location affiant had never been requested by anyone, and had never agreed with anyone to convey the land embraced in said Consolidated Placer Mining Claim, or any part thereof, to the Devil's Den Consolidated Oil Company, or to any other corporation, or person; that subsequent to the making of said location as aforesaid, affiant, together with other locators of said Consolidated Placer Mining Claim, conveyed the same to the above-named Devil's Den Consolidated Oil Company; that the reasons which caused him to convey said claim to said corporation were, that he and his colocators were at that time stockholders in said corporation; that he believed that said corporation could better do the annual assessment work and the development work on said claim than could the locators in their individual capacity, and that by conveying said claim to said corporation the assets of the corporation would correspondingly increase and the value of said stock therein be correspondingly enhanced; that said conveyance was not executed in accordance with any prior agreement, expressed or implied, made by affiant with said Devil's Den Consolidated Oil Company, or with anyone representing said company; that affiant denies that [730] said location notice was filed or posted by or for the benefit of said Devil's Den Consolidated Oil Company or that his name was employed or used by said company for any unlawful or improper purpose, or as a mere dummy; that affiant is informed and believes and therefore avers the fact to be that the names of none of the persons who were colocators

with him on said claim were employed or used by said Devil's Den Consolidated Oil Company for any unlawful or improper purpose as charged by the plaintiff in the above-entitled action, or as mere dummies.

(Signed) L. C. HYDE.

Subscribed and sworn to before me this 13th day of October, 1915.

(Signed) D. E. PERKINS,  
Notary Public in and for the County of Tulare, State  
of California. [731]

Mr. HALL.—I desire to state at this time that I reserve the right to offer the evidence of Mr. Hamel. Mr. Hamel, I think, took an affidavit from this man which is contradictory of this affidavit, and I desire to examine Mr. Hamel and introduce that original taken before Mr. Hamel when he returns. I don't know that that is true of all these affidavits of these locators, but I think it is, and I desire to make that reservation as to all of them.

The COURT.—Very well.

Mr. McWILLIAMS.—I now offer and read in evidence the affidavit of C. J. Giddings, subscribed and sworn to before D. E. Perkins, Notary Public, in and for Tulare County, State of California, on the 13th day of October, 1915.

(Whereupon Mr. McWilliams reads the affidavit of C. J. Giddings, which is as follows:) [732]

**Defendants' Exhibit "D" (Case No. A-37)—  
Affidavit of C. J. Giddings.**

State of California,  
County of Tulare,—ss.

C. J. Giddings, being first duly sworn, deposes and says: That he now is and has been for over forty years last past a resident of the City of Visalia, County of Tulare, State of California; that he is the president of the National Bank of Visalia; that he is one of the persons named in the notice of location of the Consolidated Placer Mining Claim, which said mining claim covers the northeast quarter of Section thirty (30), Township twenty-six (26) south, range twenty-one (21) east, M. D. B. & M., which said notice of location was recorded on February 23, 1907, in the office of the County Recorder of the County of Kern, State of California; in Book 40 of Mining Records, page 286; that at the time the said location was made affiant had not been requested by the above-named Devil's Den Consolidated Oil Company or by anyone representing said company to execute a conveyance of the said mining claim to the said corporation; that it is not true as alleged in the complaint in the above-entitled action that the name of this affiant, or as affiant is informed and believes and therefore alleges the fact to be, that the names of any of the locators of said mining claim were employed and used by said Devil's Den Consolidated Oil Company to enable it to acquire more than twenty acres of mineral land in violation of the laws of the United States; that it is not true that the said locators were



not *bona fide* locators or that each or any of them was without an interest in said location notice or that each or any of said persons was a mere dummy used by said Devil's Den Consolidated Oil Company for its benefit; that the conveyance of said mining claim that was executed by the locators thereof was so executed by reason of the fact that affiant was at that time a stockholder in the said Devil's Den Consolidated [733] Oil Company, and that affiant believed that such conveyance would increase the value of his stock in the said corporation; that by reason of the ownership of the said claim by the said Devil's Den Consolidated Oil Company, the annual labor and development of said claim could be carried on more expeditiously and economically to the parties interested therein; that affiant is not now and for more than two years last past has not been a stockholder in said Devil's Den Consolidated Oil Company, or in any of the above-named defendant companies, or in any way or manner interested in said companies or any of them.

(Signed) C. J. GIDDINGS.

Subscribed and sworn to before me this 13th day of October, 1915.

[Seal]                      (Signed) D. E. PERKINS,  
Notary Public in and for the County of Tulare, State  
of California. [734]

Mr. WeWILLIAMS.—I now offer the affidavit of M. T. Mills. Mr. Mills has subscribed the affidavit by making his mark. The affidavit is verified before D. E. Perkins, on the 13th of October, 1915, two witnesses having signed to the mark.

(Whereupon Mr. McWilliams reads the affidavit of M. T. Mills, which is as follows:) [735]

**Defendants' Exhibit "E" (Case No. A-37)—  
Affidavit of M. T. Mills.**

State of California,  
County of Tulare,—ss.

M. T. Mills, being first duly sworn, deposes and says: That he is now, and for over thirty years last past has been, a resident of the County of Tulare, State of California; that he is one of the locators of the Consolidated Placer Mining Claim embracing the northeast quarter of Section thirty (30) township twenty-six (26) south, range twenty-one (21) east, M. D. M., the location notice of which was recorded on February 23, 1907, in Book 40 of Mining Records, page 286 Kern County Records; that prior to the date said mining claim was located one O. D. Barton spoke to him about making locations in the Lost Hills District where said claim is situate, and he authorized said Barton to locate him on lands in that vicinity; that prior to the making of said location he did not promise or agree with any corporation, person or persons to convey said Consolidated Placer Mining Claim or any claim, or any part thereof, or any interest therein to the Devil's Den Consolidated Oil Company, or to anyone else nor was he asked, prior to said location, to convey or to agree to convey said Consolidated Placer Mining Claim or any part thereof, or any interest therein to said Devil's Den Consolidated Oil Company, or to anyone else;

That affiant denies that he was used or that his

name was used by said Devil's Den Consolidated Oil Company, or by anyone else as a mere dummy for the purpose of enabling said company to acquire more land than the law permits a corporation to acquire in a single placer mining location; and that upon information and belief affiant denies that his colocators names were used or that his colocators were used as mere dummies for said or any unlawful or illegal purpose. [736]

That about May 30, 1907, affiant conveyed his interest in said Consolidated Placer Mining Claim to the Devil's Den Consolidated Oil Company, because he was at that time a stockholder in said company and believed that that company could do the necessary assessment and development work on said land more economically and to better advantage than could the individual stockholders, and he being a stockholder in said company would derive benefit by the conveyance of said land to said company through the increased value of his stock.

That affiant is not now and for more than two years last past has not been a stockholder in said Devil's Den Consolidated Oil Company and is not now interested in said company nor in said land.

his

(Signed) M. T. (X) MILLS.

mark

M. T. Mills being unable to write his name, his name was subscribed hereto by May V. Mills and he made his mark near his said name in our presence.

(Sd.) MAY V. MILLS.

D. E. PERKINS.

Subscribed and sworn to before me this 13th day of October, 1915.

[Seal] (Signed) D. E. PERKINS,  
Notary Public in and for the County of Tulare, State  
of California. [737]

Mr. McWILLIAMS.—I now offer and read the affidavit of Hugh J. Switzer, subscribed and sworn to on October 13th, 1915, before D. E. Perkins.

(Whereupon Mr. McWilliams reads the affidavit of U. D. Switzer, which is as follows:) [738]

**Defendants' Exhibit "F" (Case No. A-37)—  
Affidavit of U. D. Switzer.**

State of California,  
County of Tulare,—ss.

U. D. Switzer, being first duly sworn, deposes and says: That he is now and for more than thirty years last past has been, a resident of the County of Tulare, State of California; that he is one of the Inheritance Tax appraisers appointed in and for the County of Tulare; that he is one of the locators of the Consolidated Placer Mining Claim embracing the northeast quarter of section thirty (30), township twenty-six (26) south, range twenty-one (21) east, M. D. M., the location notice of which was recorded on February 23, 1907, in Book 40 of Mining Records, page 286, Kern County Records; that his present recollection is that prior to the making of said location O. D. Barton asked him if he wanted to locate on mineral lands in the Lost Hills District; and that he told said O. D. Barton that he did want to locate such lands; that prior to the making of said location he did not agree

with any corporation, person or persons to convey the land so located, or any part thereof, or any interest therein to the Devil's Den Consolidated Oil Company, or to any other person or corporation.

That affiant denies that he was used or that his name was used as a mere dummy in said location to enable the Devil's Den Consolidated Oil Company to acquire more land than a corporation could lawfully acquire under one placer mining location.

That about May 30, 1907, affiant joined with his colocators of said claim in conveying the same to the Devil's Den Consolidated Oil Company; that his present recollection is that as an inducement to obtain said conveyance said company agreed to move a drilling rig which it then had in the Devil's Den District some miles from the land here in question to this land and to sink a well thereon; that affiant being a stockholder in [739] said company, thought that said company could do the assessment and development work on said land more economically and satisfactorily than could he and his colocators individually, and that by conveying said land to said company he would secure, as a stockholder the benefit of the increased value of the assets of said company caused by the acquisition of said company of the land in controversy.

That affiant is not now and for over three years last past has not been a stockholder in or in any way interested in said Devil's Den Consolidated Oil Company, or in the land described above.

(Signed) U. D. SWITZER.



Subscribed and sworn to before me this 13th day of October, 1915.

[Seal] (Sgd.) D. E. PERKINS,  
Notary Public in and for the County of Tulare, State  
of California. [740]

Mr. McWILLIAMS.—I offer and read the affidavit of E. C. Farnsworth, subscribed and sworn to on the 13th day of October, 1915, before D. E. Perkins, Notary Public.

(Whereupon Mr. McWilliams reads the affidavit of E. C. Farnsworth, which is as follows:) [741]

**Defendants' Exhibit "G" (Case No. A-37)—  
Affidavit of E. C. Farnsworth.**

State of California,  
County of Tulare,—ss.

E. C. Farnsworth, being first duly sworn, deposes and says: That he is now, and for over twenty years last past has been a resident of the City of Visalia, County of Tulare, State of California; that for over thirty years last past he has been practicing as an attorney at law in the courts of said State; that he is one of the locators named in the notice of location of the Consolidated Placer Mining Claim embracing the northeast quarter of Section Thirty (30) Township Twenty-six (26) South, Range Twenty-one (21) East, M. D. M., which notice of location was recorded on February 23, 1907 in Book 40 of Mining Records page 286, Kern County Records; that according to his best recollection and belief, before said location was made, Orlando D. Barton, with whom affiant has been interested in several

mining locations, told affiant that he intended to locate him and others on some government mineral land and affiant told him to go ahead and do so and that Barton did locate him as one of the locators of said Consolidated Placer Mining Claim as aforesaid; that at the time said location was made and for many years prior thereto affiant was a stockholder in the Devil's Den Consolidated Oil Company and ever since the date of the said location and now is a stockholder in said company; that on May 30, 1907, affiant joined with the other locators in conveying said Consolidated Placer Mining Claim to said Devil's Den Consolidated Oil Company for the reason that affiant thought that the interest of said locators being in said company and in said land, affiant and his colicators could do the necessary assessment work upon said land, and attend to matters pertaining thereto to a better advantage and with greater convenience through said company than individually; that thereafter all assessment work was done on [742] said land, as affiant understands the facts, and said land was developed by said company, all at the expenditure of a great deal of money.

That affiant denies that he permitted said company or anyone else to use his name or to use him as a mere dummy for the purpose of obtaining more land under a placer mining location than might be lawfully obtained by a corporation in a single location; that he is informed and believes and therefore alleges the fact to be that said Devil's Den Consolidated Oil Company did not use his colocators as mere dummies for the purpose of enabling said company

to obtain more land than is permitted by law to be obtained by a corporation in a single location by a placer mining location; that affiant did not make any agreement in any way or manner with any corporation, person or persons, prior to location of said Consolidated Placer Mining Claim to convey the same or any part thereof or any interest therein to the Devil's Den Consolidated Oil Company, or to anyone else, and prior to the location of said claim no one asked him to make such agreement or conveyance, or told him that he was expected to make such agreement or conveyance.

(Signed) E. C. FARNSWORTH.

Subscribed and sworn to before me this 13th day of October, 1913.

[Seal] (Sgd.) D. E. PERKINS,  
Notary Public. [743]

Mr. McWILLIAMS.—I offer and read the affidavit of Charles Togni, subscribed and sworn to on the 12th day of October, 1915, before D. E. Perkins, Notary Public.

(Whereupon Mr. McWilliams reads the affidavit of Charles Togni, which is as follows:) [744]

**Defendant's Exhibit "H" (Case No. A-37)—  
Affidavit of Charles Togni.**

State of California,  
County of Tulare,—ss.

Charles Togni, being first duly sworn, deposes and says: That he now is and for more than forty-two years last past has been a resident of the City of

Visalia, County of Tulare, State of California; that he is one of the persons named as a locator of the Consolidated Placer Mining Claim embracing Northeast quarter of Section Thirty (30) Township Twenty-six (26) South, Range Twenty-one (21) East, M. D. M., a copy of which location notice was recorded on February 23, 1907, in Book 40 of Mining Records page 286, Kern County Records; that the location notice of said Consolidated Placer Mining Claim was actually posted on the ground by one, O. D. Barton, who shortly thereafter informed affiant that he had located him as one of the locators of said claim; that affiant does not now recall that said O. D. Barton had, previous to said location, spoken to him in regard to said location, but when Barton informed affiant of the location and that affiant was named as one of the locators therein, affiant consented thereto and acquiesced therein; that affiant had never at any time prior to being informed by said Barton that he was one of the locators of said claim, consented or agreed with anyone to convey said land or any interest therein to the Devil's Den Consolidated Oil Company; that thereafter affiant and his colocators conveyed said Consolidated Placer Mining Claim to the Devil's Den Consolidated Oil Company because said affiant and his colocators all being stockholders in said Devil's Den Consolidated Oil Company it was believed that it would be to their best interest to execute such conveyance.

Affiant denies that said location notice was posted for the benefit of defendant Devil's Den Consoli-

dated Oil Company; and [745] denies that he was a mere dummy used by said company in making said location for its benefit; that affiant is informed and believes and therefore avers the fact to be that the names of his colocator were not used by said defendant, Devil's Den Consolidated Oil Company as mere dummies.

That about November, 1913, affiant visited the said Consolidated Placer Mining Claim and noticed considerable gypsum thereon, that affiant was aware that gypsum was generally regarded as being a valuable fertilizer of soil, and himself used gypsum theretofore on his farm with beneficial results to the soil; that affiant accordingly ordered twenty-five tons of the gypsum on the said mining claim from the said Devil's Den Consolidated Oil Company, and agreed to pay therefor Seven Dollars (\$7.00) per ton f. o. b. at Wasco; that by reason of the heavy rains of that winter, the Devil's Den Consolidated Oil Company found it impracticable to deliver the said gypsum to affiant.

(Signed) CHARLES TOGNI.

Subscribed and sworn to before me this 12th day of October, 1915.

[Seal] (Sgd.) D. E. PERKINS,  
Notary Public in and for the County of Tulare,  
State of California. [746]

Mr. McWILLIAMS.—I now offer and read the affidavit of A. R. Orr, subscribed and sworn to before D. E. Perkins on the 13th day of October, 1915.

(Whereupon Mr. McWilliams reads the affidavit of A. R. Orr, which is as follows:) [747]



**Defendants' Exhibit "I" (Case No. A-37)—Affidavit  
of A. R. Orr.**

State of California,  
County of Tulare,—ss.

A. R. Orr, being first duly sworn, deposes and says: That he is now and for about forty years last past has been a resident of the County of Tulare, State of California; that he is one of the locators named in the notice of location of the Consolidated Placer Mining Claim embracing the Northeast quarter of Section Thirty (30), Township Twenty-six (26) South, Range Twenty-one (21) East, M. D. M., which location notice was recorded February 23, 1907, in Book 40 of Mining Records at page 286, Kern County Records; that prior to the time said location was made he authorized O. D. Barton to locate him as a placer mineral claimant and locator on lands on the west side of the San Joaquin Valley and at and in the vicinity of the lands in question; that prior to the date of said location affiant never agreed with said O. D. Barton or with the said Devil's Den Consolidated Oil Company, or with any of its officers, agents, employees or stockholders that he would convey to said corporation said Consolidated Placer Mining Claim, or any other placer mining claim and he made no such agreement prior to the date of the execution of the deed conveying said claim to said Devil's Den Consolidated Oil Company, which deed was dated May 30th, 1907.

That affiant denies that his name was used or that he was used as a dummy by said corporation for

the purpose of enabling said corporation to locate more land than was allowed by law to be located by a corporation, or for any other unlawful or illegal purpose; that affiant is informed and believes and therefore alleges the fact to be that the names of his colocators were not used nor were said locators used as dummies for any illegal or wrongful purpose in the making of said location.

That at the date of said location and at the date of said [748] deed affiant was a stockholder in the Devil's Den Consolidated Oil Company, and that said deed was executed by him and his colocators in order that said mineral land might be more conveniently and economically developed and the assessment work thereon be more conveniently and economically performed by said corporation than by said individual locators; that he was interested in other lands in the Lost Hills District and in the vicinity of the above described land and he was of the opinion that by executing the conveyance of the above named Consolidated Placer Mining Claim to the Devil's Den Consolidated Oil Company that the said claim would be developed and the value of his holdings outside of the said mining claim would be correspondingly enhanced.

That I am not now and have not been for more than five years last past a stockholder in or in any manner had any interest in the Devil's Den Consolidated Oil Company.

(Sgd.) A. R. ORR.

Subscribed and sworn to before me this 13th day of October, 1915.

[Seal]                      (Sgd.) D. E. PERKINS,  
Notary Public in and for the County of Tulare, State  
of California. [749]

Mr. McWILLIAMS.—I now offer and read and affidavit of O. D. Barton, subscribed and sworn to before D. E. Perkins on the 13th day of October, 1915.

The COURT.—That is the same Barton who gave a deposition?

Mr. McWILLIAMS.—Yes. He is the man who actually made the location.

(Whereupon Mr. McWilliams read the affidavit of O. D. Barton, which is as follows:) [750]

**Defendant's Exhibit "J" (Case No. A-37)—  
Affidavit of O. D. Barton.**

State of California,  
County of Tulare,—ss.

O. D. Barton, being first duly sworn deposes and says: That I have lived in Tulare County, California for fifty years last past; that during that period of time I have made a practical study of the subjects of geology and mineralogy; that I was employed by the Devil's Den Consolidated Oil Company and its predecessors in interest from the year 1899 to the year 1909 to care for, supervise and classify the properties and holdings of those companies in the Devil's Den District and vicinity with full liberty under the terms of my contract to make mining locations for myself and for my friends and to carry

on such independent investigations as I might desire.

That I was present at the annual meeting of the stockholders of the Devil's Den Consolidated Oil Company which was held on January 25, 1907; that after the adjournment of said meeting of the said stockholders and while those present were preparing to leave the place of meeting, I suggested to a number of them that if they desired I would locate them on claims which I was planning to take up in the near future; that the said persons agreed thereto; that thereafter and on or about the 13th day of February, 1907, I located a number of mining claims; that among those located was the Consolidated Placer Mining Claim located on the northeast quarter of Section Thirty (30), Township Twenty-six (26) South, Range Twenty-one (21) East, M. D. M., which claim I located in the names of Charles Togni, Paul Sweitzer (whose true name is U. D. Switzer), E. C. Farnsworth, A. R. Orr, M. T. Mills, C. J. Giddings, L. C. Hyde, and W. B. Wallace; who were among those who requested me to make such location at the said meeting; that I named the said mining claim the Consolidated Placer Mining Claim because of my interest in the said company, on account of my long connection with it; that [751] the suggestion was not made, however by any of the stockholders, officers or representatives of said Devil's Den Oil Company, prior to my making said location, that I should locate any mining claim for or on behalf of said Devil's Den Consolidated Oil Company,

but I hoped that the said stockholders would see fit to convey the said Consolidated Placer Mining Claim which I located as aforesaid to the said Devil's Den Consolidated Oil Company, and I named the said claim Consolidated Placer Mining Claim as a suggestion to them of the propriety of deeding said mining claim to the said Devil's Den Consolidated Oil Company, but I at no time expressed my desire to that effect to anyone connected with the Devil's Den Consolidated Oil Company and the suggestion was never made to me, and no promise was ever made to me that such conveyance would ever be made or effected.

That the location of the said Consolidated Placer Mining Claim was based on a discovery of gypsum theretofore made by me upon the said land; that in many places on said land the beds of massive gypsum or gypsite were exposed on the surface; that excavations showed a blanket deposit of gypsum extending generally over all the land embraced in said location, except where eroded away, varying in thickness from one foot to three feet and lying at all points near or on the surface; that beneath this upper deposit are successive parallel deposits of gypsite, and crystallized gypsum extending down to a depth of sixty feet and perhaps seventy feet; that the first mentioned or upper stratum of gypsite is of more than sufficient purity for commercial purposes and is so located on the land that it can be easily and economically mined and removed; that in the month of January, 1907, I accompanied Mr. Frank L. Hess on a trip which he made in the



Lost Hills district in which the above named claim is located; that I called his attention to [752] the gypsum and gypsite which is to be found on the west half of Section Thirty (30) Township Twenty-six (26) South, Range Twenty-one (21) East, M. D. M., and saw him take samples of gypsum and gypsite therefrom; that the results of the examination and analyses thereof are set forth in Bulletin No. 413 being a reconnaissance of the gypsum deposits of California, published by the Department of the Interior; that the gypsum deposits on the east half of said Section Thirty are far more extensive than on the West half, but that by reason of a lack of time I was unable to take Mr. Hess on the said northeast quarter of said section.

That during all of the period referred to above I kept a journal of all facts which I deemed worthy of record and that prior to executing this affidavit I have examined the said journal for the purpose of refreshing his recollection as to the facts set forth herein.

That I am not now and for about four years last past have not been a stockholder in the said Devil's Den Consolidated Oil Company or in any manner interested therein.

(Sgd.) O. D. BARTON.

Subscribed and sworn to before me this 13th day of October, 1915.

[Seal] (Sgd.) D. E. PERKINS,  
Notary Public in and for the County of Tulare, State  
of California. [753]

Mr. HALL.—I now desire to hand, in the presence of Court and counsel for the Devil's Den Consolidated Oil Company, those three letters that you inquired about. Let the record show that I hand to counsel for defendant a copy of the letter from my files, dated October 23, 1914, addressed to C. D. Hamel, and supposedly signed "W. B. Wallace"; also, March 2, 1916, dated Visalia, California, addressed to Frank Hall, United States Assistant District Attorney, supposedly signed by W. B. Wallace; and a letter dated the next day, March 3d, 1916, from myself, as Special Assistant to the Attorney General, addressed to Judge W. B. Wallace, Judge of the Superior Court of Tulare County, California, I want the record to show that I do not vouch for the accuracy of the Wallace letter to Hamel, but I will produce the original at some time.

Mr. DUNNE.—We will use it provisionally, subject to comparison and correction.

Mr. HALL.—I have no objection to your doing it.

Mr. McWILLIAMS.—I offer and read in evidence what purports to be a copy of a letter referred to by Judge Wallace in the affidavit which I am now about to read, which letter is dated October 24, 1914, and is addressed to Mr. C. D. Hamel, and I ask that to read.

(Whereupon Mr. McWilliams read the letter above referred to, which is as follows:) [754]

Visalia, Cal., Oct. 24, 1914.

Mr. C. D. Hamel,

Dear Sir: In answer to your inquiry as to the location as an oil mining claim of the NE.  $\frac{1}{4}$  of Sec. 30,

Tp. 26 S., R. 21 E., M. D. B. & M., which the locators thereof subsequently transferred to the Devil's Den Consolidated Oil Co., I have to say that at the time said locators made their locations on that tract of land, I was a stockholder and director in said company. Mr. O. D. Barton was also a stockholder and the agent and manager thereof in the field. He, with H. J. Hoyt and other stockholders and I believe directors in said company, went in the Lost Hills region in which said lands were situated, to locate mining claims for different parties, who afterwards formed the Lost Hills Mining. While engaged in said work, they located the particular tract described, for the Devil's Den Consolidated Oil Co., using eight names, all of which, as I recollect, were the names of stockholders in said company. My name was one of the eight. Barton reported the fact to us, and we eight ratified the location by him for the benefit of said company, and we joined in a deed conveying all our right, title and interest in said land to the Devil's Den Consolidated Oil. The conveyance was made without pecuniary consideration whatever from the said Company, and none of said locators nor said Company paid Mr. O. D. Barton or Mr. Hoyt anything for making said location.

Very truly yours,

(Signed) W. B. WALLACE. [755]

Mr. DUNNE.—Now, then, we will read another affidavit of Judge Wallace.

Mr. McWILLIAMS.—It is executed the 23d day of June, 1916, and sworn to before D. E. Perkins, Notary Public.

(Whereupon Mr. McWilliams read the affidavit of Judge Wallace, which is as follows:) [756]

**Defendants' Exhibit "K" (Case No. A-37)—  
Affidavit of W. B. Wallace.**

State of California,  
County of Tulare,—ss.

W. B. Wallace, being first duly sworn, deposes and says: That he is the same W. B. Wallace, who made an affidavit on October 13, 1915, to be used in the above-entitled cause; that prior thereto on October 24, 1914, at the request of C. D. Hamel of the U. S. Land Department, he wrote a letter in reference to the location of Section 30, T. 26 S., R. 21 E., M. D. B. & M.; that he kept no copy of said letter and did not have it in mind at the time of making said affidavit; that later when in attendance as a witness in this court in the above-entitled cause at Fresno, he was asked for a statement of the facts within his knowledge concerning the location of said land and gave to the attorney or agent of plaintiff a statement as he recollects in accordance with that contained in said affidavit; that thereupon said letter was exhibited to him; that later he procured from the office of the U. S. District Attorney a copy of said letter and has studied it carefully and given much time to recalling all the facts and circumstances that have been within his knowledge pertaining to the location of said land.

Affiant further says: that said letter was hastily written during a time when affiant was exceedingly

busy and contains some inadvertent and erroneous statements and conclusions.

Affiant further says, that he was one of the organizers of the Devil's Den Consolidated Oil Company, a stockholder and director therein from the time of its formation and president thereof during most of said time until in the late spring or early summer of 1911 when he sold all of his stock therein and since said time has had no interest in said company; that while a stockholder thereof until he sold his stock he owned 1,001 shares [757] of stock which interest never varied; that during most of said times, Mr. O. D. Barton was agent and field manager of said Company, and was also a director; that Mr. Barton rarely came to Visalia, the principal place of business of said corporation, except to attend a meeting of directors or stockholders; that at no time did Mr. Barton or anyone else suggest to affiant or said company that such company acquire by locations on public lands any lands whatever; that Mr. Barton or anyone else was ever authorized by affiant to use his name to make any mining or oil land location on public lands for the benefit of said corporation; that prior to the location of said land in said Section 30, and the location of other lands in that vicinity subsequently conveyed to Lost Hills Mining Company, affiant had but one conversation with Mr. Barton and none with Mr. Hoyt, in reference thereto in which Mr. Barton told affiant that he was going into the Lost Hills region to locate some oil mining claims and asked him if he wanted to join with others, some of whom he named or exhibited a list



of, in making such locations; that affiant answered affirmatively and told Mr. Barton to put him on as many locations as he made if agreeable to him; that Mr. Barton made no suggestion that a claim be located for said corporation; that is the substance of all conversations that affiant had with Mr. Barton on that subject; that it took place in Visalia and as affiant recollects at the time of a monthly meeting of the board of directors of said corporation.

Affiant further says, that some weeks afterwards he met Mr. Barton again in Visalia when the latter told him the number of locations he had made and of those in which affiant was made one of the locators; on that day or later Mr. Barton proposed that one of the mining claims might well be conveyed to said corporation; affiant had been located in about twenty claims; it was a new undeveloped [758] region and affiant had no knowledge of the relative values of the various locations; he assented to the proposition; Mr. Barton suggested the location in said Section 30; affiant consulted with the other locators of that claim and as all were stockholders in said corporation they agreed to make the transfer and joined in a conveyance to said corporation; Mr. Barton made the selection; when the deed was presented to the corporation its board of directors accepted it; nothing was paid by such corporation for the conveyance; affiant further says that he paid Mr. Barton about this time twenty or twenty-one dollars as his part of the expense of locating the Lost Hills claims one dollar for each, but as at the time of payment he had agreed to or had joined in a conveyance

of the claim in said Section 30 to said corporation he made no charge for that location.

(Signed) W. B. WALLACE.

Subscribed and sworn to before me this 23d day of June, 1916.

[Seal] (Signed) D. E. PERKINS,  
Notary Public in and for the County of Tulare,  
State of California. [759]

Mr. McWILLIAMS.—I now offer the affidavits in evidence and ask that they be marked Defendant Devil's Den Consolidated Oil Company's exhibits consecutively.

(Said documents so offered in evidence are marked, respectively, in Case No. A-37, Equity, as Defendant's Exhibits "B" to and including "M.")  
[760]

Mr. McWILLIAMS.—I offer in evidence the affidavit of Hugo Fischel, subscribed and sworn to on the 25th day of October, 1915, before Grace R. Schmitt, Notary Public in the City and County of San Francisco.

(Whereupon Mr. McWilliams introduced in evidence the above affidavit, which is as follows:)  
[761]

**Defendants' Exhibit "L" (Case No. A-37)—  
Affidavit of Hugo Fischl.**

State of California,  
City and County of San Francisco,—ss.

Hugo Fischl, being first duly sworn, deposes and says:

That he is a mineralogist by profession; that he

was educated at the University of Vienna, Austria, where he studied for four (4) years, from 1894 to 1898, receiving his instruction in mineralogy under the well-known mineralogist, Professor Suess; that ever since leaving the University of Vienna, affiant has been practically continuously engaged in mining and in the manufacture of commercial products from industrial minerals, such as lime, clays, magnesite, manganese and gypsum, the last ten (10) years of which period were spent in the said line of work in the State of California;

Before coming to America in 1903, affiant gained practical experience with the mining and refining of gypsum in the great gypsum works in lower Austria and in Argentuil and Clamart near Paris, in which places he experimented with gypsum as a retarder of the setting of cement;

Affiant has also had considerable experience with gypsum since his arrival in the United States, having explored for gypsum to be used in the manufacture of cement; that affiant is particularly familiar with the gypsum deposits on the Dunne Ranch near King City, Monterey County, California; with the Bitter Water District in San Benito County, California, and with the deposits near Mendota in Fresno County, California;

Affiant also says that he is well acquainted with the literature dealing with gypsum and gypsum deposits in different parts of the world;

That during the month of October, 1915, affiant examined the gypsum deposits contained on the northeast quarter (NE.  $\frac{1}{4}$ ) of [762] Section

thirty (30), Township twenty-six (26) South, Range twenty-one (21) East, M. D. B. & M., in the company of W. H. Ochsner; that in said examination of said tract of land affiant, together with the said W. H. Ochsner, examined the whole thereof, and found that there was a stratum of gypsum varying in thickness from one and one-half ( $1\frac{1}{2}$ ) to three (3) feet and even five (5) feet in some places exposed by an elaborate system of trenches; that affiant dug into the soil in a number of places on the said tract and found gypsum a few inches beneath the virgin soil;

That the examination made by the said Ochsner and himself was not limited to the tract above described, but was carried on beyond the limits of said tract, and affiant found as a result of such examination that said stratum of gypsum was not limited to the said tract described above, but that it extended to a considerable distance in all directions;

That affiant made a conservative calculation as to the amount of gypsum contained within the boundaries of the above-described tract and determined and computed that the said top stratum contained at least four hundred thousand (400,000) tons of marketable gypsum and gypsite;

That in so far as affiant and the said Ochsner were able to do so, they examined the gypsum underlying the stratum above referred to and observed that there were a number of other strata below it, varying in thickness from a few inches to a number of feet; that the development work done was such as to indicate exactly how much deeper the gypsum extended;



that affiant and the said Ochsner while making the said examination gathered fairly representative samples from each five-acre tract of the whole of said northeast quarter; that said samples were placed in ore sacks, which were locked and which were then shipped [763] to San Francisco;

That thereafter the said samples were opened in San Francisco by the said W. H. Ochsner and affiant and delivered to the firms of Curtis & Tompkins and Smith, Emery & Company, analytical and industrial chemists with offices in San Francisco; that some of the samples from the same lot were also delivered to one Rudolph Schwarzlose, a keramical chemist of Alameda, California, with instructions to calcine the same to demonstrate the character of the finished product when made into plaster of paris;

That the gypsum contained in the said tract above described compares very favorably with the gypsum used and manufactured in the large factories of Europe;

That by reason of the form in which the said gypsum occurs, it can be worked with but a very small amount of capital, since extensive machinery is not required to mine it; that the use of plows and scrapers would be sufficient for the mining of said gypsum. In this respect the said gypsum contained in said tract of land is far preferable to most gypsum properties visited by him, because of the facts that most gypsum properties in this country and in Europe require elaborate machinery for the mining of the same;

That the greatest advantage possessed by this



tract for the purpose of mining and refining of gypsum and for the manufacturing of said gypsum into plaster of paris is its accessibility to a cheap fuel supply, in that the said tract is located in the heart of the oil belt of California; that in this respect the said tract has an advantage not possessed by any large gypsum supply known to affiant:

That affiant has examined the analyses of said gypsum submitted by the said Curtis & Tompkins and Smith, Emery & Company, [764] as aforesaid, and states as a result of such examination and such analyses, the greater part of the said gypsum contained in the said tract is equal to that produced in any section of the world, and that a very considerable part of the said gypsum is of higher quality than the material generally used in the gypsum mills of Paris, which is the greatest gypsum manufacturing district in the world.

Affiant further says that these gypsum deposits are situated conveniently to one of the greatest agricultural regions of California, namely, the San Joaquin Valley, and with proper transportation facilities these gypsum deposits will become very valuable for use in fertilizing the said agricultural lands; that gypsum is the most efficient kind of a fertilizer for alkali lands which exist in large tracts in said section of California;

Affiant further says that gypsum which is sixty per cent (60%) pure can be profitably marketed, and that the gypsum used in the Paris districts averages about seventy-eight per cent (78%) pure; that Dana's handbook of mineralogy gives seventy-eight

per cent (78%) purity as the standard of gypsum;

Affiant further says that Mr. Frank L. Hess, who made a report on the gypsum deposits for the Government of the United States, which report is published in Bulletin 413 issued by the United States Geological Survey of the Department of the Interior in Washington in 1910, has stated that the deposits of gypsum in this locality are the most extensive which he saw in California, and affiant states that it is his belief that these gypsum deposits are among the largest, if not the largest, ever discovered in the State of California.

That the attached photographs were taken by the said W. H. Ochsner and himself while on the trip made on the above [765] described lands in the month of October, 1915, and that the said photographs fairly and honestly illustrate the deposits of gypsum upon said land as the same are now exposed;

Photograph No. 1 shows a trench about four (4) feet deep, dug in solid gypsite; the sacks are filled with gypsite taken from the trench;

In photograph No. 2 the top stratum of the average of about one foot in thickness, which stratum is marked "A" is a mixture of soil and gypsite; below it is a stratum marked "B" of solid gypsite;

No. 3 is a photograph of affiant standing in a cut or trench; from a point indicated by the hammer to the bottom of the trench is solid gypsite; the sacks appearing are filled with gypsite; the depth of the gypsite in this vicinity is not accurately known to affiant, on account of the lack of depth of the trench;

In photograph No. 4 the gypsite extends from the

place indicated by the hand to the bottom of the trench, being about two (2) feet in thickness; above this stratum is a stratum of soil and gypsite mixed about one (1) foot in thickness;

Photograph No. 5 shows a trench cut in gypsite; the surface of the ground is covered with gypsite and the sacks are also filled with gypsite;

The cut or trench in photograph No. 6 shows solid gypsite to a depth of about four (4) feet; the sacks are filled with gypsite taken from the trench;

No. 7 is a photograph of affiant standing in a trench cut in the gypsite;

Photograph No. 8 is the same as No. 7. Other cuts made in the vicinity shown in this photograph indicate that the gypsite covers almost all, if not the entire area of the land covered by [766] this photograph;

Photograph No. 9 shows a shaft which is about twelve (12) feet deep; the area of the shaft shown in the picture is composed, upper part gypsite and lower part crystalline gypsum (selenite).

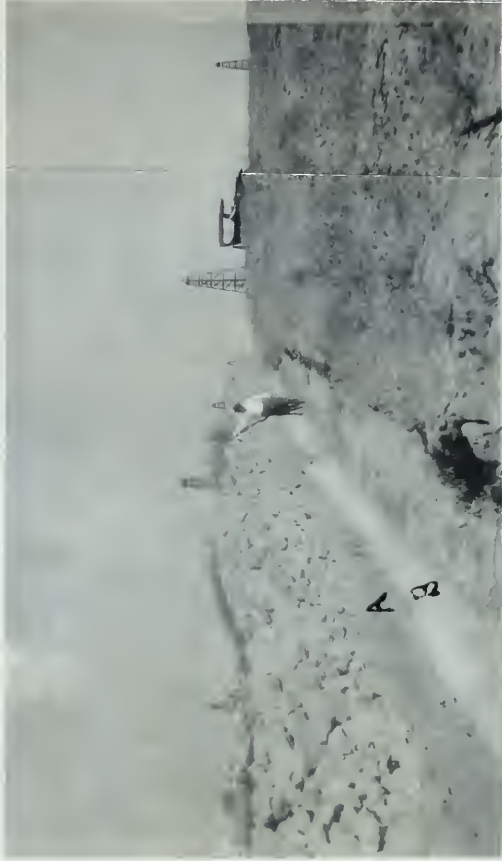
Gypsite is gypsum ore. [767]



No. 1



No. 2



No. 3







No. 4



No. 5



No. 6



No. 7



No. 8



No. 9







(Signed) HUGO FISCHL.

Subscribed and sworn to before me this 25th day of October, 1915.

[Seal]

GRACE R. SCHMITT,

Notary Public in and for the City and County of  
San Francisco, State of California. [770]

Mr. HALL.—I object to that reference to the handbook giving 78 as the Standard.

Mr. DUNNE.—I am afraid if that motion is granted it will dispose of Mr. Jennings' testimony.

The COURT.—It will be stricken out. He was giving his own opinion, though.

Mr. DUNNE.—I will not make a motion on that ground.

Mr. HALL.—I also object to the extract from the bulletin.

The COURT.—Stricken out.

Mr. HALL.—May I interpose an objection to the remaining part of this affidavit and the attached photographs for the reason that there is no specific allegation that the statement made and the photographs attached refer to the Northeast quarter of Section 30, 26-21, which was the land in suit?

The COURT.—That goes to the value of the testimony.

Mr. McWILLIAMS.—I call your Honor's attention to the statement that said photographs fairly and honestly illustrate the deposits of gypsum on the said land as the same are now exposed.

Mr. HALL.—He describes the whole area of the land that he examined.

Mr. McWILLIAMS.—It may be well to stipulate

that the description may be deemed in evidence, as it will be unintelligible unless the Court has the photographs under his eye.

Mr. DUNNE.—I assume your Honor at a more convenient time will look at these things. We are very anxious to have you inspect them.

Mr. HALL.—I am, too.

The COURT.—Yes. Go ahead.

Mr. McWILLIAMS.—That is all, except the identity and description of these photographs, which I ask to be admitted in evidence. [771]

Mr. HALL.—My objection goes to this affidavit, too, because it was taken on the 25th of October, and was not served on us. [772]

San Francisco, California, August 24, 1916,  
2 o'clock P. M.

**Testimony of Raymond Albert Morton, for  
Plaintiff.**

RAYMOND ALBERT MORTON, produced as a witness on behalf of plaintiff, and being first duly sworn, testified as follows:

**Direct Examination.**

By Mr. HALL.—I am the secretary of the Lost Hills Mining Company. Also the secretary of the Devil's Den Consolidated Oil Company; and the secretary of the Universal Oil Company. I have occupied these various positions since November, 1913.

Since I have been secretary of these two companies I have had in charge the books and records of these several corporations. I have a record showing the

(Testimony of Raymond Albert Morton.)

property owned by these several companies. The only land owned by the Lost Hills Company outside of the lands involved in suits Number A-57 and A-52 would be the southeast quarter of 32, township 26 south, 21 east. There is no other land owned by the Lost Hills.

The Lost Hills Company is not engaged in any other business than the production of oil, which is confined entirely to these lands involved in these suits together with the southeast quarter of 32, 26-21.

The Universal Oil Company owns the south half of the southeast quarter of section 3, township 27 south, range 21 east; the northeast quarter of the northeast quarter and the southwest quarter of the northeast quarter, and the south half of the northwest quarter of the northeast quarter of section 10, township 27, south, range 21 east; the west half of the southwest quarter of Section 33, 26 south, range 23 east. That is all. None of these properties that I have just described, and which are not involved in this suit, are being operated for oil. None of them are being [773] developed for oil to my knowledge. That is all the property owned by the Universal, other than those involved in the suit.

I have a list of the property owned by the Devil's Den Consolidated Oil Company. The east half of the southwest quarter, the southeast quarter and the west half of the northeast quarter, of Section 23, township 25 south, range 18 east; and all these prop-

(Testimony of Raymond Albert Morton.)

erties that I have enumerated here are patented lands.

This land owned by the Devil's Den Company in 23, 25-18, is not producing oil, nor has it ever been developed for oil to my knowledge. I have no knowledge of any of the lands being developed for other minerals. I believe that these lands are said to be agricultural, although I don't know that.

The oil production from the lands which are involved in A-37, that is, the northeast quarter of Section 30, 26-21, was 29,852.41 barrels for the month of July, 1916. These records are kept as a whole. According to my figures the production from those unpatented lands, being the northwest quarter and the southeast quarter of Section 30, the northeast quarter, the northwest quarter, the southwest quarter of Section 32, 26-21, being the lands involved in suit, was 22,431.57 barrels. That is a figure that I arrived at by taking a *pro rata* of our daily report sheets and taking the proportionate part that this unpatented land bears to the total, and taking that *pro rata* of the actual proportion gives me 22,431.57 from all the unpatented land. The total production from all our property is 43,768.91 barrels. The only other property that we have which is producing is the southeast quarter of Section 32. That is the only patented property which the company has which is producing. In estimating the production I have figured as a whole, and then took this *pro rata*; so that there is no available way by which I can separate each quarter or [774] separate from the

(Testimony of Raymond Albert Morton.)

total production the amount that was produced from the southeast quarter.

This production is not only from the land involved in this suit but also from the southeast quarter of 32, and a portion of Section 5. That is the total production, and there is no way of separating it. I have to take it as a whole. Section 5 is patented land, but it does not belong to any of the three companies that are sued here.

The southwest quarter of 18, 26-21 produces when operated, at intervals, but I have no figures and can give no estimate or idea because I don't think it was ever kept—accurately.

I had supervision of the general books of account of the three companies. It is not a production account; it represents the sales made. There is an account showing the value of the gypsum that has been disposed of from these lands, but I did not look that up. There is a small portion sold of which an account is kept in the book. I think that gypsum was sold the latter part of 1913 or early part of 1914. I do not remember the quantity and amount but will look it up for you.

None of these companies have a bonded indebtedness but have outstanding liabilities. The Devil's Den has nothing. The Universal, I think, has \$1,139,000, evidenced by outstanding notes. The Lost Hills has nothing. The indebtedness of the Universal Oil Company is for the original development of the property and carrying on the business



(Testimony of Roy N. Bishop.)

up to the time of produuction. These notes still have some time to run. [775]

**Testimony of Roy N. Bishop, for Defendant.**

ROY N. BISHOP, produced as a witness on behalf of defendants, having been first duly sworn, testified as follows:

Direct Examination,

By Mr. DUNNE.—I am familiar, speaking generally, with the Lost Hills property and the Devil's Den Consolidated property involved in these litigations, A-37, A-57 and A-52. I have been president and general manager of the Universal property since July, 1913, and general manager of the Devil's Den since July, 1913. The Lost Hills property would be the Universal property. That is the same thing. I have been in general charge and management of these properties since July 3, 1913.

I am a mining engineer by profession. First educated at Cornell, as mechanical engineer. I was at Cornell for two years taking this course. After leaving Cornell I went into the Army at the time of the Spanish War, as a private. I served in the Spanish-American War. After the war was over I went to Washington State and worked as an ordinary miner for a year. After that time I went to Columbia University, the School of Mines. I graduated as a mining engineer from Columbia School of Mines in 1902. I hold an academic degree for that curriculum as mining engineer.

After leaving Columbia I was actively engaged in

(Testimony of Roy N. Bishop.)

my profession as a mining engineer till the Fall of 1909. Briefly, in 1902 I was erecting a stamp-mill and other works at the Greenback mines in Oregon. In 1903 I went to Central Siberia, for the Morgan and Hearst estate, in charge of the property there, and developed property on which they had an option. The property did not prove worth working and I left there and went to the West coast of Mexico examining mines up until about 1907. In 1907 and 1909 I was general manager of the Balakala copper property, for about two years. [776]

Oil mining is the simplest kind of mining, as compared with the metalliferous mining or metallic mining. After I ceased my connection with the copper mining industry in California, I went into business for myself, buying electric distributing plants and by putting economy and efficient management into them and building them up, sold them. I had the property in San Bernardino County, Merced and Sacramento. They were defunct companies which I built up and sold. I was engaged in that business from the Fall of 1909 until July 3d, 1913. During those four months it is fair for me to say that I specialized in operating economies.

My next line of activity was at the request of the Universal Oil Company to go down and examine their properties with the idea of analyzing some difficulties they were having with water. That was previous to my employment, however. I went down there not in their employ permanently. My employment followed, and I have been in this managerial

(Testimony of Roy N. Bishop.)

capacity ever since; I have been connected with it ever since, and also with the Palace Hotel. I was put into the Palace Hotel also to try to reorganize their operating system.

Q. Now, Mr. Bishop, there has been some testimony here, I think, by Mr. Gillan in respect to the operations of the wells on this property; that the wells were pumping considerable oil and were pumping considerable water; the testimony was somewhat general in character, but I am giving its large aspects. I wish you would explain to his Honor in your own way, without prompting from me and with due brevity, the situation in respect to the production of oil, the presence of oil in that water, the difficulties that were encountered, how they have been met and what degree of efficiency and prevention of waste you have sought to infuse into the administration of these properties; will you tell that story in your own way?

A. Can I do that by showing on this chart here? [777]

Mr. DUNNE.—Yes, if you will.

A. (Referring to chart.) When I first went to the Lost Hills to make an examination of their property with reference to water which was in the sand, I spent some days studying the logs and history of the wells that had been turned in by the drillers that had drilled the wells. There were so many wells on the property that it was difficult to keep the data within my mind as to the exact depth at which each well had been cemented, and that was of the greatest importance. After I devoted some two weeks in

(Testimony of Roy N. Bishop.)

making a model similar to this—this is not the model, but is another one. The idea of this model was to show by various colors the various formations through which the drill had passed, in reaching the oil sand. There is also indicated on this by a dark blue mark indicating a shell. The little white marks indicate the depth at which the casing was cemented. There is a light blue sand showing here—a sand which is colored light blue—which indicates a water sand. In the event that the cementing of these wells had been above that water sand, it would be presumed or known that the water sand—

(Whereupon the witness was interrupted by counsel for plaintiff interposing objection, which was overruled.)

The WITNESS.—(Continuing.) This is a true model of the oil field which I made personally—

Mr. REDDING.—Will you allow me to suggest that you define the area of the land and the demarcation on which these pegs are put?

A. On this piece of wood is a map of the country. This quarter section in here is the Devil's Den. This is Section 30. This is Section 32, Section 5, and this runs on to the General Petroleum and the Standard Oil. This is Universal, 32, and Universal, 30, and the Devil's Den. That is the discovery well on the property. [778]

Q. (By Mr. HALL.) Which is the discovery well?

A. This one. That is the discovery well. Number 1, on the Northeast quarter of 30 is the discovery

(Testimony of Roy N. Bishop.)

well of the district. This careful analysis was made in this way to ascertain if there was any reason for the water being in the field due to poor handling of the cement and endeavor to keep the water out. In one well, Number 3—

Mr. DUNNE.—May I interrupt you by asking what you mean by “cementing”?

A. A casing, which is a pipe, is driven into the ground, and when it comes to a location or a distance down below which we think there is oil, or for other reasons, it is decided to cement that casing so as to prevent any water which may be above from flowing down the sides of the pipe and into any oil sands that may be below, so that this cement is back of the pipe and the pipe made solid so that no water can go down.

The WITNESS.—(Continuing.) From the surface of the earth you pump cement down the hole on the inside, and force it up to the outside. That cement forms a hard substance which is impenetrable to the superincumbent water, protecting the oil sands beneath.

After making my study I discovered that one well, Number 3 on 32, had passed through an oil sand and come into what was very probably a damaging water sand. This was from the records. I then placed before the management that it would be necessary to cement this well and plug it and abandon the well completely. There was a geologist on the ground who disagreed and said that it would be folly to waste the money to cement the well, claiming that



(Testimony of Roy N. Bishop.)

that water was edge water. Edge water is a term given to the water that is in the anticlinal fold of the sand and which replaces the oil after the oil is taken out.

Oil is lighter than water. It floats on water.  
[779]

By the term "anticline" I mean the top or apex of the anticline showing the sand dipping down this way and also that way. The oil is found toward the apex of the anticline. And as the lighter substance it takes up that position with the water below that it edges; and that is what we term edge water.

It was problematical as to whater this was edge water or water from this particular well. The management, however, told me that they would spend \$50,000 to endeavor to locate the source of the water, and I was authorized to go ahead and cement the well. We cemented the well, filling the hole full of cement to a height beyond any possibility of any water sand letting water in below. That was our first step. We then took each well individually and in cases where we though there was a possibility of the cement job not being good, we re-cemented the well. In several instances we shut off some water. After taking all the wells in this manner, we decided that we had done all that was possible physically in the well—each well—to stop any water. And it was very probable that there was edge water coming in and that we should do our best to get all of the oil out before the edge water should encroach on the oil field and mingle with it and destroy the oil. So we

(Testimony of Roy N. Bishop.)

placed our compressors and pipe in these wells that had the greatest amount of water, and raised all the water and oil that we possibly could out of the wells. In wells such as Number 28, which was a bad well for water, we succeeded in pumping the water out by compressed air separately in one pipe and pumping the oil in another pipe, so that we were raising oil and water—over two thousand barrels of water to get one hundred barrels of oil. We have been doing that for several years and we have gained a little bit on the water, and the water at no time has gained on us. We have tried that practice on several other wells to fight the water. Number 5 on 30, we installed a compressor on. The quantity of oil in it was small and [780] we decided recently to abandon it and we carefully plugged the well so that it would not destroy any adjoining property. As a proof that it is very probably edge water in many instances, Number 1 well, the original discovery well, was sunk without any cement put in it, and the well ran for years with a very small percentage of water, Adjoining that well—

Q. (By Mr. REDDING.) Let me interrupt you. I think you mentioned the discovery well being on the northeast of 30. Don't you mean the Northwest?

A. The Devil's Den.

Q. That was not the northeast of 30

A. No; the northwest of 30. As illustrating our difficulties, the location immediately next to this discovery well which had no cement or protection to

(Testimony of Roy N. Bishop.)

keep the water out, we drilled a well and cemented it very thoroughly and made a most perfect test of the water and satisfied ourselves that there was no water above the cement job. We went into the sand and found some 90 per cent of water adjoining the well which had no water to speak of. Since that time the water has increased on us. We handled that water with compressed air so that we are getting all the oil that there is there out of it. That has been our operation so far as the handling of water is concerned. Each well is treated as an individual problem and a very thorough record kept by plotting the production with the results of our endeavor to stop the water.

Q. (By Mr. DUNNE.) As illustrative of that, can you turn to your record to just one page and illustrate that to his Honor?

A. This is a chart. Each of these little divisions indicates the number of barrels of oil a day. Each of these represents one day; January 1st, 2d, 3d, 4th, 5th, and so forth. At these places where the oil production is not shown they were doing [781] some work on it. This is the production for six months. This well, 28, was equipped with an air line and the production was raised on January 12. March 4 the well was tubed, and in addition to the air line the well was put on the beam and the production increased. That was on March 4. January, February, March. Right here the production was raised that day, but the following shows that the result increased. The well is now operated with both a

(Testimony of Roy N. Bishop.)

pump and air line and the amount of water reduced. In May a broken air line caused reduced production for a few days. This shows on each one how we plotted it daily to find out the result of any work that we did. We have that for every well, for the entire period of our operation. Now, for the operating of the property, in a mining sense it may be divided into two classes. First, the mechanical operation of the property necessary to produce the oil, and, second, the economic handling of the oil after it has reached the surface. So far as the mechanical operation of our property is concerned, we feel that we have reached the highest stage of efficiency. All of our steam pipes are encased in the ground so as to avoid any loss of steam. All steam leaks have been eradicated and we have a steam engineer on the ground who has charge of all our mechanical property and who has been in my employ for many years.

Q. (By Mr. DUNNE.) What do you mean by "encasing" the steam pipe? How does the encasement, such as it may be, compare in administration with the administration of other oil properties?

A. Ordinarily they are merely laid on the ground or covered under the ground with a few inches of sand; while in this they are covered with an asbestos covering to keep the heat and steam from radiating from the pipe. That practice is not carried on in the oil fields, but we extended into the oil field and we tried to put steam pipe in the same manner to avoid loss just [782] as they are in this building. That loss would be the using up of more of our fuel



(Testimony of Roy N. Bishop.)

oil in order to generate the steam if we did not have those economies. That oil is worth to us as much as we can sell it for, so it is necessary to charge it in our operating account at what we can sell it for, and we are endeavoring to save the waste and use of oil which we could otherwise sell. After the oil has reached the surface the problem is to deliver the oil in as close to the exact state it was in under the ground as possible to the selling company, avoiding all losses from the time at which it was extracted from the earth until it is sold to the company. In the fields and in this field the oil, when it is pumped out of the ground, is allowed to flow in a trough with partitions in it, the idea being to separate the sand and allowing the oil to flow on down into a tank. This is considered bad practice for the reason that that would be the very method that we would use if we decided to evaporate any substance. We would expose it over a broad area to the sun's rays in order to evaporate it. So we made some experiments in our field with several kinds of tanks. A common tank used in the oil field is a cone top. I made these experiments myself. That is the kind of a cone you would make if you intended to attract the sun's rays. It did not seem economical. We had one made as a model, and we had what we call a water-sealed tank, which is an ordinary tank with a drop down inside of about six inches, and extending over the tank, and it is completely covered over, and about three or four inches of water placed on top of it, the idea being that the sun's rays striking the top of the tank would



(Testimony of Roy N. Bishop.)

have to evaporate the water before it can reach the oil.

Q. (By Mr. DUNNE.) Do I understand you that in a water-sealed tank you have a compartment which is made by putting a floor across the tank a few inches deep and you put water in that and [783] have a little lake of water, and that the rest of the tank or barrel underneath that floor is where you keep the oil?

A. Yes. May I draw a sketch of it?

Q. If you please.

A. (Drawing a sketch on the blackboard.) This will represent the well, a pipe coming out of the well. This is the tank into which it is flowing. Riveted to the side of the tank is this top, air-tight. The top of that is some four inches of water. This pipe goes through here air-tight, so that the oil from the well is discharged into this tank without being exposed to the air. In our experiments we found that this raised the gravity of the oil from one to two per cent, and saved in volume a loss which was occurring of some two per cent, so it was decided to put these tanks into the field. At that time we were selling oil to the Standard Oil Company and it was necessary for us to raise our gravity a degree in order to obtain five cents a barrel. We started installing these tanks, and before we had them completely installed we had received five cents a barrel for all the oil that we were selling to the Standard Oil Company, and that paid for it within a few weeks. By the expression "that

(Testimony of Roy N. Bishop.)

paid for it in a few weeks'' I mean the cost of stalling.

Q. The cost of the economy?

A. The cost of the economy. The object in handling oil from the well to the producer, in order to save all that is in the oil as it is in the earth, is to handle the oil from the wells to the tank from which the purchaser buys it, without exposing it to the air, and keeping it at the same temperature. This will enable us to get all that there is in the oil for sale to the company, and not let any evaporation or other waste by flowing on the ground. To do that, instead of having a long trough which would let the oil [784] flow exposed to the air and the sun's rays and evaporate and other loss come to the oil fields, we have put in this separator, which is merely a small tank, water-sealed, with a cone bottom under it, with a 6-inch valve. The oil in the tank floats on top of the water which will settle with the sand into the bottom of the cone. The oil is drawn off pure or with very little water in it into this receiving tank.

The WITNESS.—(Cont.) When the oil comes up from the well and passes into this water-sealed tank, there is some water mixed with this ascending and descending oil. The water is the heavier substance and goes below, and the oil is on top. There is probably some sand there too. To get rid of the sand and water which are admixed with that oil we open this valve which is a large flushing valve and let the sand and water flush out. But there is no

(Testimony of Roy N. Bishop.)

oil possible to escape with it because it is sealed up in here. We stop when the water gets down to a point like this, so there is never an opportunity for any oil to get on the ground.

The oil is in an air-tight compartment. It is drawn from the air-tight compartment over into another one which is the main receiving tank for the oil after it has been separated from the water. That receives maybe the entire day's run of oil, and there may be some water that will settle at the bottom. If it settles at the bottom the pumper draws off the water at the bottom, in which there may be some scum, into this receptacle here.

After that scum of oil has accumulated in this tank to a sufficient depth to justify, there is a pipe connected with the machinery which pumps it back into this, so there has never been any opportunity for a drop of oil to touch the ground nor for the sun's rays to heat it, and it preserves the exact condition that it was in when it was taken from the earth. That was proved by the [785] fact that we were able to get more money for it after treating it in this manner from the Standard Oil Company. This tank in many instances is resting on a platform, so that it will go by gravity into this central collection tank in the field. That central collecting tank is also water-sealed. So that we have the oil coming from the wells into the collecting tank water-sealed, and it has not been exposed to the air. By automatic arrangement in this general receiving tank, when it contains a certain definite amount of oil the mach-

(Testimony of Roy N. Bishop.)

inery is automatically started and the oil is pumped to a larger receiving or shipping tank. The oil now is in our shipping tank ready for the purchaser to gauge it and test it and buy it, and as we sell it we feel that we have done everything that is possible to get the gravity as high as possible or keep it as high as it was and keep the volume from decreasing.

We have eliminated every single opportunity for waste in the oil. The oil has not touched the ground nor has it been exposed to the air. This oil is gauged and sold to the purchaser.

The COURT.—Q. You have an oil tank at each well?

A. Yes. This is a photograph of one of them.

Q. Do you have a generating plant for generating power?

A. We have several central plants. The main pumping plant is located a little distance from the oil wells themselves and is used only for pumping oil to the purchaser and also for operating the air-compressors. Many of the wells are operated with gas. But wherever it is necessary to use steam, we have two or three boilers, and our boilers are all housed or covered. Evidence of waste in the oil field is indicated by the product being on the ground that you are trying to sell, in most oil fields. You can walk around and get it on your shoes. Around the wells, a picture of which you have in front of you, you cannot get any oil on your shoes, because [786] it has been encased continually. Further than that, on some of our very tanks where the oil does not

(Testimony of Roy N. Bishop.)

evaporate readily and where it was not necessary to put the water seal on top, we have equipped them with these devices without the water seal. We have painted the upper half of every tank in the field that receives oil, white.

Q. (By Mr. DUNNE.) Is that a new departure?

A. That is not done in any other field. We have painted all of our tanks white so that we immediately detect if a pumper during the night had permitted any oil to flow over his tank and color the side, in which case he would have to wash it with distillate or paint it. In such a case the pumper is discharged. In that way we assure ourselves that the oil is not wasted. I may say that the Government has asked me for plans of these things so that they might adopt them.

The well on the southwest of 18 we re-cemented the well and protected it thoroughly from any opportunity for the water to come in, and made a test on it, pumping it for a week's run, using the oil on the road. We are not now pumping the well regularly, although the well is in a position to pump. The reason we didn't pump at that time was that it was a very heavy oil.

We feel that we have done everything that anybody could do to operate and protect the well from water. The Standard Oil Company have instructed their men to handle their light oil in the same manner that we do, as they feel it is the last word in the method of handling the oil.

Q. Without making unnecessarily invidious dis-



(Testimony of Roy N. Bishop.)

criminations with respect to this encroachment of water upon the oil, how do the results of your administration in your field, as described by you, compare with conditions and results in other fields in that general territory? In other words, how do water conditions in your field [787] compare with the water conditions elsewhere?

A. The water conditions in our field are much better, you might say, than in older fields. In the Kern fields, which is one of our oldest fields, they are compelled to pump a great many of their wells by compressed air, as the water is now replacing the oil as it is extracted. Our field being the younger field, has not as much water as the other field.

Cross-examination.

By Mr. HALL.—I had never examined any oil wells prior to the time I went down as an efficiency and economy expert for the Lost Hills Company.

Q. That, then, is your first experience as an oil engineer?

A. I am not an oil engineer now. I don't know what that term means.

I am not a mining engineer who has specialized in the geology which relates to the production of petroleum. I have never had any experience as a mining engineer with respect to the extraction of petroleum from the earth's surface. My first experience, then, in that line, was with these Lost Hills and Devil's Den wells in 1913. I was not employed primarily by these companies as an efficiency and economy expert. I was employed to go down

(Testimony of Roy N. Bishop.)

and study the water conditions and the general operating conditions of the field. I have never studied the water conditions in any other oil field. I had never studied the water conditions in any other single oil well prior to that time. I had never drilled an oil well. I was employed July 3d, 1913.

Since that time the economic and efficient methods which [788] I have installed in the conduct of these properties has been this system of tanks that I have illustrated on the blackboard. That is one of the efficiency methods I have produced. Another is the covering of the steam pipes. The next efficiency and economy measure introduced was the study of the cost of operating the oil wells by an accounting system on the unit basis which enables us to compare month by month and day by day the cost of each article of labor and supply that goes into the production of oil and the cost per barrel. That covers the entire economic situation. That system of economic accounting was installed by me. I supervise it. I got it up. It requires one stenographer and bookkeeper to keep up that economy system of accounts, hired continuously, month by month.

The cost of installing the top placed on the tank which we have cost \$40 to the tank. We have about sixty tanks. They are not all equipped, however, with that. The amount that we made in saving on the increased price of oil paid for that system the first month. They have not been renewed since then. I cannot answer as to the saving in steam due to the covering of the steam pipes. At present we prob-

(Testimony of Roy N. Bishop.)

ably have ten, approximately, wells that are being pumped by steam pipes that have been covered. The rest are being pumped by a casing-head gas. Casing-head gas usually escapes and is lost if it is not used in pumping. That economy of using casing head gas in pumping is largely adopted in all the oil fields. That is no particular economy of mine that I discovered.

I think we are pumping about fifty-four wells down there. The cost to the company in covering these steam pipes was a portion of the lumber and the labor of installing them. I don't know what it was; that would be very small. The saving of steam by that [789] method would be whatever was radiating and would depend—wherever steam or heat radiates from pipe, it would depend on the well and other conditions. I have not figured out by my system what that saving would be in dollars and cents. I don't know what the cost of that installation of that efficiency method was, in dollars and cents.

Q. Were those all of the efficiency methods you have introduced down there?

A. The efficiency methods are covered by stating that the system of records and accounting which comes up to us from day to day and from month to month, shows by comparison whether our costs are increasing or decreasing and acts as an alarm to indicate from what source the leak is occurring, so that we can remedy it. In that way we are able to find out whether we are using too much oil. There are many minor economical details that I could discuss

(Testimony of Roy N. Bishop.)

with you that are in operation due to this alarm system, as I will call it.

The WITNESS.—(Continuing.) Prior to the time that I was employed in July, 1913, Mr. Cameron and Mr. Davis were both occupying the position I had. Mr. Davis is an engineer. I don't know about Mr. Cameron being an engineer. I have continued right along in the employment of these companies since that, and am so employed now. I do not devote my entire time to the business of the corporations. I am acting as executive head and supervising the business of production of oil from these particular wells twenty-four hours a day. I am also assistant to the president of the Palace Hotel. I have no other business outside of that. As to the time devoted to that business, it will vary on various days. I make my headquarters at the Crocker Building and at the Palace. [790]

About once a month I go down and visit these oil wells, and spend from one to two days, unless we are doing some drilling.

Q. You average two or three days a month?

A. During the last year I was about the properties continuously.

The WITNESS.—(Continuing.) I get most of my facts from daily reports of the people who are down there, and I base my opinion as to whether or not the plant is being conducted economically from actually seeing it, but based largely on the daily reports. Those daily reports come in and they are all compiled by the stenographer and these figures

(Testimony of Roy N. Bishop.)

are all made by the stenographer and bookkeeper, and I take my opinion from the record—

The men down there in the field actually doing the pumping are very efficient men. There have been no wild lavish expenditures of money during the last year or two. And the natural decrease that will occur in the quality of oil in a well I have not been able to remedy. In this work and other work they pay me a thousand dollars a month. They pay me for supervising the oil production from this property and other things—my salary is not segregated by the quarter-section. It is a thousand dollars a month. The stenographer and bookkeeper in the field receives a salary of \$200 a month; but that is segregated amongst the companies. We have a stenographer down there in the oil fields who makes up these reports. Prior to the time that I became their efficiency and economy expert they had three or four, and three in the office here in San Francisco.

This model was made probably in the spring of 1914.

I have indicated on here wells that are being operated by people other than the Devil's Den and the Lost Hills and the Universal. Every one of the wells on the Lost Hills, Universal [791] and Devil's Den Companies' property was making water when I went there first to examine it in 1913. We have succeeded in shutting off the water in well Number 24 on Section 32 (indicating on model), but not entirely. I forget the exact record of that well.

Well 25 we have worked on a great many times, and



(Testimony of Roy N. Bishop.)

have been unable to do anything with it. This produces no water and no oil and is a gas well. There is no water flowing. It is cemented up and used as a gas well.

We worked on 31 but did not diminish the water any. The fact that we diminished the water in well 24 by cementing it would seem to indicate that the water that that well was making was not edge-water but upper water, so that when we found it we were able to cut off the water that was coming in from that well from the upper sand. Apparently, then, that had not been done at the time it was drilled.

The proper and careful method of drilling is to shut that water off if possible as you go down when you drill. Can I explain to you that well so that you will understand it and know why it was not?

Q. Yes.

A. On well Number 33, when the well was sunk to hit a sand here which had some oil in it, and the oil flowed out or was pumped out under small pressure. The next day the well dropped very much less in oil and increased in water. We decided that it was not a good oil sand because the water had come in so quickly and we decided to go deeper. We went down into this shell. This is a shell which is a harder formation of the rock. We drilled down into that and drilled on through—first we drilled into that there and cemented that and came down into this sand here. This started pumping oil without any water in it and it looked very good, and [792] we pumped for a day, when it turned into water. But

(Testimony of Roy N. Bishop.)

having found this hard shell between these two sands, we felt, inasmuch as water came in suddenly, that there must be something broken in here, and we came back and re-cemented on that shell and got a very solid job, and in that well we shut off this sand and are producing oil from that sand, whereas this sand we felt had previously been considered oil sand. And in this particular instance we proved that it was not a good oil sand or had too much water in it to justify working it, and we cemented down here and obtained oil from that sand. That led us to study our model in which we saw—a much larger model than this—in which we saw this shell showing continuously for a certain number of wells, and those wells that had water in we assumed had been handled the same almost as we handled this. So we took those wells—number 11 is one of them and 2 is another—and went to all those wells and went back and endeavored to re-cement. In some instances it was successful, and in other places it showed that it came through cutting the shell away and it was impossible to cement.

In the wells which we tried to re-cement water had been allowed to flow since they were drilled. In those individual cases it was not until I took hold of it that they properly cut off that water supply. In my own judgment, then, I abandoned this upper oil sand. That is cemented also so that this upper water does not flow into the oil sand. It is cased off here. We absolutely know that it is protected. We have cased it off from this lower one. We have only

(Testimony of Roy N. Bishop.)

about four feet in it to catch that. The wells had always been cemented above, and the water was not coming from the upper oil sand. Water was coming from below only in Number 3, which we re-cemented immediately.

We have treated a great many wells to cut off that water. [793] We have treated every one in which the record showed sufficient water to justify us in believing there was something wrong with the drilling. I have come to no conclusion as to the number of wells carelessly and negligently drilled in this field. I don't know that any of them weree. In going into a new country it must be considered as prospecting, and whatever was done in endeavoring to find oil out where there was not a well, cannot be considered as bad drilling.

This was not a new country when I arrived there. There were about twenty-eight wells down. There are about thirty-seven now. Only nine more have been put down since I came there. There had been an effort to cement off water in all of the wells prior to the time I arrived. I don't know whether it had been a success; nobody can tell whether it is a success or not a success. All of them were producing water at the time I arrived, and all of them, more or less, are producing water now. In some instances the water these wells are producing has increased and in some instances it has diminished. I should say that the amount of water in the total production from these properties has increased since I have been there.

(Testimony of Roy N. Bishop.)

As a conclusion I am not prepared to state that these wells are making what is known as edge water, but I should say that they are because, in the study of the field I feel that these sands here are disconnected and that this is not one continuous sand. And in some instances it may be edge water and in others not. So I am not prepared to say whether this is edge water that is coming into these wells here. The indications are that it is; I am fighting that everywhere. If it is edge water it would come from the sand below and the lower leg of the anticlinal fold.

Q. Would one of those legs of the anticlinal fold be [794] down in section 9, 10 and 3, as indicated in your peg-model?

A. The fold would be on either side of a straight line between my two fingers.

Mr. DUNNE.—Q. On either side transversely?

A. Yes, sir. That is, the fold is this way.

Mr. HALL.—Q. Then you would call the lowering of the oil sand as it gets lower in sections 3, 9 and 10, a sort of a plunge instead of an anticlinal fold?

A. The same sand that you are talking about that has the water in does not exist in 10.

The WITNESS.—(Continuing.) It is not what we call a plunge. In my theory it is a separate sand. This sand does not run out here at all. So that the effect of these lower wells would not have anything to do with these wells up here. Our wells are in beneath the lenses of this oil sand. I believe this sand here has faded at this point. I believe that two hun-

(Testimony of Roy N. Bishop.)

dred feet below there is a separate sand which extends through the Standard Oil property and which we have obtained back here at this point at several points here, and I believe we have another still below the present sands which show. I believe that the water is in this upper sand and has always been in the upper sand, and that in this sand it does not exist, and it must be thoroughly inspected, and the State Bureau of Inspectors are not telling our people to shut off the water in this particular sand. They are compelling us to shut it off above.

Q. Isn't it possible that the water is coming from the neighboring wells into your wells?

A. They have used as much precaution as we have.

The WITNESS.—(Continuing.) Their wells are lower down on the anticline. I can't tell you one way or another as to our wells making edge water.

Q. How can you intelligently attempt to cut off water when [795] you don't know whether it is edge water, bottom water or top water?

A. That is the point where the experiments come in. If we knew it was top water, edge water or bottom water, the problem would be very simple.

Q. And with your efficiency and economy method you have not been able to tell in these wells whether it is top, bottom or edge water?      A. Exactly.

The WITNESS.—(Continuing.) We have made experiments in wells Number 10 and Number 3 and cut off below to ascertain whether it is bottom water, and found it was bottom water there. This is the only one in which we drilled through the oil sand



(Testimony of Roy N. Bishop.)

and had an opportunity to get bottom water. In the rest it merely went into the sand.

None of these wells were drilled with rotaries. It is a fact, however, that they do plunge through the sand sometimes and don't know it. Number 3 is the only well in which we have plugged off the bottom water. But from our study that is the only one indicated bottom water. We have not tried it on any other well, and we don't know whether it is top water, bottom water or edge water.

We have thirty-five producing wells. I don't know what number of them is pumped by steam.

Q. Isn't it a fact that eight are pumped by steam, three are flowing, and twenty-four are pumped by casing-head gas?

A. That is approximately correct, with the exception of the flowing wells.

The WITNESS.—(Continuing.) If I have stated that there is not a place on our property where the oil is allowed to flow out exposed to the open air, it must be corrected. I stated where we did not have the water top, that the tanks were painted white to show the overflow. The lower gravities it is not so necessary to protect in this way, because the evaporation does not show sufficient to justify putting tops on. [796]

Q. Isn't it a fact that Devil's Den Number 2 on the northeast quarter of 30 is flowing out into an open trough?

A. These wells are all being changed now. I think you will find that well at the present time is not.

(Testimony of Roy N. Bishop.)

The WITNESS.—(Continuing.) It may have been on the 1st of August. I was not there the 1st of August. We are in the process of doing it. We started at this end of the field, and are working up the field. That is at the south end of the field.

Universal Number 1, on the northwest of 30, is flowing into an open trough; flowing into a very large tank. I don't know about 31, but it is not flowing into an open trough. I don't believe it was flowing into an open trough on the 10th of August. It has been about a month since I have been there—Number 31 on the Universal; and to my knowledge I should say not.

There are about fifty-two men employed on that property. From forty-five to fifty-two men, and their time is divided between the Devil's Den, Lost Hills and Universal Company, and other properties that they are pumping. Aside from the wells involved in these three suits they are pumping the wells on the southeast of 32. They are pumping some wells on Section 5. And they are pumping thirty-five wells on the other part of this property—the property that is involved in these suits. These men so employed are also drilling. The cost of labor of the men and their support, we have not segregated or charged to the lands in this suit. We have not segregated it into the Devil's Den and Universal Oil Company. We do not charge each well or each quarter section, so it would be impossible for me to tell what part belongs to these lands. They would have to be prorated.

(Testimony of Roy N. Bishop.)

The well on the southwest of 18 is closed and not in operation; it was cemented off. It is not plugged. It is a very [797] heavy oil. That is the only well there is there. If they were maintained in the same situation that they are now, without the wells being operated, I don't believe it would be any injury to the property for the reason that there is only one well there.

There are adjoining wells in the next section, but not what we know as line wells. I should say the nearest well is about two locations away. I mean by that that it would be six or seven or eight hundred feet from our well—from this well on the southwest of 18 to any other producing well. There is a little water but not much on that well in 18. The water was not great enough to notice; they all make some water when you pump them. We have no dry well. We attempted very thoroughly to shut off the water in that well, but don't know whether we have succeeded or not. We tested it for a week and it showed no alarming amount of water. It would indicate that the water was shut off. It shows a little water.

Q. Do you know what method oil drillers usually use in determining whether or not water is top water, edge water or bottom water?

A. To determine whether it was a top water or not they would probably plug it up and test it to see whether the water was flowing from the top, and to test it for water the best test then is to drill out where

(Testimony of Roy N. Bishop.)

the edge water is supposed to be and see if it is there.

They use the aniline test or dye test. They would use that to see if water from one well was going to another well; whether it was flowing in a stream. We have tried that in our property, but never could get any results. Never could determine from it. In the southwest of 18 it is a low gravity or heavy oil. The reason we shut it off was because we had but the one well and [798] didn't care to drill more, and it was uneconomical to have a man located there to operate that one well.

Q. There is a market there close by? That is, a company with a pipe line?

A. Yes, sir; there has been recently some activity in the last six months.

The WITNESS.—(Continuing.) Purchasing companies are not willing to buy oil from lands in litigation unless the money is placed in escrow or stipulated with the Government in some way for their protection.

Q. (By Mr. HALL.) The purchasing companies have been very free to buy it from the receiver where the lands were taken into the hands of receivers?

A. In some instances. I don't know about any of the others. It is only hearsay to me.

The WITNESS.—(Continuing.) Our companies have not been in the hands of a receiver. Referring to this introduction of the painting of the tanks, the Standard Oil does not pursue that policy with all their tanks in the field. In their pipe-line division they do. In their production, they do not. I didn't

(Testimony of Roy N. Bishop.)

get that idea from their storage tanks, but I got it from a pipe-line division with a little tank at the steam plant that the Standard Oil Company had. That is how I appropriated the idea.

Mr. DUNNE.—I would like to ask just one question of the witness. You have indicated a great deal of familiarity with this property and detailed familiarity with it. Have you undertaken to convey the impression that the only time you ever spent upon the property was one or two days a month?

A. That would be false, if that impression was created. I lived on the property almost continuously for months while I was installing and making these experiments. For the last year I have [799] not devoted as much attention to the operation of the field by being there personally, for the reason that it has become a manufacturing business operating a system which I felt does not require that close attention. But I am thoroughly familiar, so that if anything should occur I could tell. Previous to that we had been drilling and it required very close attention.

These visits of one or two days a month are characteristic of the last year.

These efficiency plants were installed at the south end, and we worked them gradually to the other end. That installation preceded the commencement of these suits. The well that my attention was called to was the extreme well on the north.

The COURT.—I have been led to assume in these oil suits that if wells are once opened on property of this kind it is necessary to keep them in operation in



(Testimony of Roy N. Bishop.)

order to preserve the property: In other words, they cannot be closed down. Is that correct?

A. That is the general impression that prevails. I have recently seen tests of wells that were shut down for a year and started up, which show the opposite to be true.

Whereupon Mr. McWilliams offered in evidence three photographs which were identical with the photographs which are attached to Mr. Fischl's affidavit, and which bear upon the back thereof the following inscription:

"State of California,  
County of Merced.

W. H. Ochsner being first duly sworn, deposes and says, that the within photograph was taken by him on the northeast quarter of Section 30, township 26 south, range 21 east, M. D. B. & M., and that said photograph shows the gypsum which exists on said land." [800]

Mr. McWILLIAMS.—This photograph you will find corresponds to number 3 in the affidavit.

Mr. McWILLIAMS.—(Producing another photograph.) The photograph which I now show your Honor is a copy of photograph number 2 as it appears in Mr. Fischel's affidavit.

Mr. McWILLIAMS.—(Producing another photograph.) The photograph which I have handed to your Honor is a copy of the photograph number 8.

(The above photographs marked Defendants' Exhibits "M," "N" and "O," respectively, with affidavits of W. H. Ochsner attached, are as follows:)  
[801]

*Trench N.W. Cor 160 Aers. N.E. 1/4 Sec 30*

*T. 26 S. R. 21 E.*

STATE OF CALIFORNIA )  
City and County of Merced ) ss.

W. H. OCHSNER, being first duly sworn,  
deposes and says:

That the within photograph was taken by  
him on the northeast quarter (NE<sup>1</sup>) of Section thirty  
(30), Township twenty-six (26) South, Range twenty-  
one (21) East, M. D. B. & M., and that said photo-  
graph shows the gypsum which exists on the said land.

Subscribed and sworn to before me,  
this 10 day of October, 1915.

*W. H. Ochsner*  
NOTARY PUBLIC

In and for the City and County of  
Merced, State of  
California.





W No. H-37-84  
U.S. vs. Davis & Co. Const. Co. &  
Defendants Exhibit - "N"

FILED

ALL IN

J.F. H. 1914



1970

no. 2

Trench N.W. 1/4 of N.E. 1/4 Sec 30  
T. 26 S. R. 21 E.

STATE OF CALIFORNIA )  
City and County of Merced ) ss.

W. H. OCHSNER, being first duly sworn,  
deposes and says:

That the within photograph was taken by  
him on the northeast quarter (NE 1/4) of Section thirty  
(30), Township twenty-six (26) South, Range twenty-  
one (21) East, M. D. P. & M., and that said photo-  
graph shows the gypsum which exists on the said  
land.

Subscribed and sworn to before  
me, this \_\_\_\_ day of October, 1915.

NOTARY PUBLIC  
In and for the City and County of  
Merced, State of  
California.





STATE OF CALIFORNIA )  
 City and County of Merced ) ss.

W. H. OCHSNER, being first duly sworn,  
 deposes and says:

That the within photograph was taken by  
 him on the northeast quarter (NE<sup>1</sup>) of Section thirty  
 (30), Township twenty-six (26) South, Range twenty-  
 one (21) East, M. D. B. & M., and that said photo-  
 graph shows the gypsum which exists on the said  
 land.

Subscribed and sworn to before me,  
 this 10 day of October, 1915.

W. H. Ochsner  
 SOLELY PUBLIC  
 Is and for the City and County of  
Merced, State of  
California.



Plat 7-37-6  
 E. S. W. 1/4 Sec. 30, T. 26 S., R. 21 E., M. D. B. & M.  
 Merced Co., Cal.  
 "C"



(Testimony of Roy N. Bishop.)

Mr. McWILLIAMS.—I now offer and read in evidence the affidavit of William H. Ochsner, subscribed and sworn to on the 25th day of October, 1915, before Grace R. Schmitt.

(Whereupon Mr. McWilliams introduced in evidence the above affidavit, which is as follows:)

[802]

State of California,

City and County of San Francisco,—ss.

William H. Ochsner, being first duly sworn, deposes and says:

That he is, and for ten (10) years last past has been, a resident of the City and County of San Francisco, State of California;

That he is a graduate of and that he was formerly connected with Stanford University, engaged in research work in economic geology;

That he is at present and for more than five (5) years last past has been, occupied as and in the business of a consulting geologist;

That affiant during the month of October, 1915, personally visited the NE.  $\frac{1}{4}$  of Section thirty (30), township twenty-six (26) south, range twenty-one (21) east, M. D. B. & M., in Kern County, about twenty-two (22) miles west of Wasco, and examined the said land with particular reference to the gypsum and gypsite contained therein; that such examination covered a period of approximately two (2) days; that all of said land was examined on said trip; that affiant from observations then made by him is of the opinion that there is a layer or stratum

of gypsite, or gypsum ore, covering practically the entire tract of land above-described, and varying in thickness from one and one-half ( $1\frac{1}{2}$ ) to three (3) feet, and that the said layer or stratum of gypsite would aggregate about four hundred thousand (400,000) tons; that extensive development work has been done on said land consisting of open trenches and pits, all of which expose large bodies of gypsite; that the development which has been done on the said tract of land indicates that below the layer or stratum referred to are [803] other strata of gypsite varying in thickness from a few inches to several feet; that the amount of development is not such as to indicate just how extensive are the deposits of gypsite on the said land in addition to the four hundred thousand (400,000) tons above referred to as being found in the upper stratum. It is my opinion that several times this amount of gypsum can be produced from this land.

That on said trip affiant took eighteen (18) sacks of samples, characteristic or representative of said gypsite constituting the top stratum on said land; that said samples were taken from practically each and every five (5) acre tract of said northeast quarter of Section 30; that certain of said samples representative of the entire tract were delivered by affiant to the firm of Curtis and Tompkins and to the firm of Smith, Emery & Company, analytical and industrial chemists, located in San Francisco, and said firms were requested by affiant to make an analysis of the contents thereof; that affiant received from the said firms the analyses which are attached hereto and

marked Exhibits "A" and "B" respectively;

That the attached analyses indicate that the gypsite on the said land is typical gypsite, capable of being used for land plaster or fertilizer and in the manufacture of plaster of paris and certain classes of cement, and all other industrial uses of gypsum; that gypsite which is sixty per cent (60%) pure can be profitably marketed; that the uses of gypsum are growing rapidly and extensively; that in my opinion the value of this land as a gypsum mine is very great and will become more valuable with time; and it is not at all unlikely that the land is more valuable now for gypsum than for oil;

That affiant is thoroughly familiar with the method of recovery and the preparation of gypsum for market for industrial [804] and commercial purposes and with the cost thereof; that affiant is of the opinion that the said gypsite deposits on said land above-described, considering the ease and cheapness with which it can be mined and its nearness to cheap fuel of the neighboring oil fields, can be marketed at a substantial profit with the present transportation facilities; that the construction of a railroad on or in the vicinity of the said lands would insure the success for a number of years of a company undertaking to produce and market the said gypsum.

(Signed) WILLIAM H. OCHSNER.

Subscribed and sworn to before me this 25th day of October, 1915.

[Seal]

GRACE R. SCHMITT,  
Notary Public in and for the City and County of  
San Francisco, State of California. [805]



## EXHIBIT "A."

Laboratory No. 26118/21

San Francisco, Oct. 13, 1915.

M. W. H. Ochsner,

We have examined your sample of Gypsum (4 samples), received 10/5/15; marked as below and found the samples as received to give the following results:

ANALYSIS.				
	#26118	#26119	#26120	#26121
	NW. cor. of	Trench		Station
	NW. cor.	200' SW.	#3.	150' SE.
	Subject	55° of		15° of
	Photo.	Well 7.		Well #8.
Sulphur Trioxide (SO <sub>3</sub> ).....	38.18%	27.08%	35.59%	39.70%
"        "        as gypsum				
(CaSO <sub>4</sub> 2H <sub>2</sub> O) .....	82.05%	58.20%	76.50%	85.40%
Water (Loss at 150° C).....	17.63%	14.00%	16.70%	17.33%
Theoretical loss of ¾ths water				
content of Gypsum in				
Samples Received .....	12.87%	9.14%	12.02%	13.42%
Excess Water .....	4.76%	4.86%	4.68%	3.91%
[Seal]				

CURTIS & TOMPKINS,  
Analytical & Industrial Chemists.

[806]

## EXHIBIT "B."

Date, October 13, 1915.

LABORATORY

No. 34428.

Sample Gypsite

Received October 7, 1915.

Submitted by Mr. W. H. OCHSNER, First National  
Bank Bldg., San Francisco.

Marked "Station #3. Near Well #7. 3' thick  
from well."

# ANALYSIS.

Silica & Ins. ....	21.58%
Alumina    )	
) Fe <sub>2</sub> O <sub>3</sub> .....	1.24%
Iron Oxide)	
Gypsum (CaSO <sub>4</sub> (2(H <sub>2</sub> O).....	72.28%
Calcium carbonate (CaCO <sub>3</sub> ).....	1.35%
Magnesium Carbonate (MgCO <sub>3</sub> ) .....	1.65%
<hr/>	
Total.....	98.10%

Respectfully submitted,

[Seal]

SMITH, EMERY & CO.,  
Chemists & Chemical Engineers [807]  
Date, October 13, 1915.

## LABORATORY

No. 34429.

Sample Gypsite.

Received October 7, 1915.

Submitted by Mr. W. H. OCHSNER, First National  
Bank Bldg., San Francisco.

Marked "Station 4 West of #6 well, and south side  
gulch leading to pumping plant."

# ANALYSIS.

Silica and Ins.....	3.30%
Alumina    )	
) Al <sub>2</sub> O <sub>3</sub> —Fe <sub>2</sub> O <sub>3</sub> .....	0.40%

Iron Oxide)

Gypsum ( $\text{CaSO}_4 \cdot 2(\text{H}_2\text{O})$ ) ..... 91.52%Calcium carbonate ( $\text{CaCO}_3$ ) ..... 2.60%Magnesium Carbonate ( $\text{MgCO}_3$ ) ..... 0.73%

---

 Total ..... 98.55%

Respectfully submitted,

[Seal]

SMITH, EMERY &amp; CO.,

Chemists &amp; Chemical Engineers. [808]

LABORATORY

No. 34430.

Date, October 13, 1915.

Sample Gypsite.

Received October 13, 1915.

Submitted by Mr. W. H. OCHSNER, First National  
Bank Bldg., San Francisco.Marked "Sample taken from trench H. 70° W. #5  
S. 45° E. #1 Sec. 30, Devil's Den A.

## ANALYSIS.

Silica &amp; Ins. .... 4.07%

Alumina    )

)  $\text{Al}_2\text{O}_3$ — $\text{Fe}_2\text{O}_3$  ..... 0.20%

Iron Oxide)

Gypsum ( $\text{CaSO}_4 \cdot 2(\text{H}_2\text{O})$ ) . .... 91.92%Calcium carbonate ( $\text{CaCO}_3$ ) ..... 1.36%Magnesium Carbonate ( $\text{MgCO}_3$ ) ..... 1.23%

---

 Total ..... 98.78%

Respectfully submitted,

[Seal]

SMITH, EMERY &amp; CO.

Chemists &amp; Chemical Engineers. [809]

LABORATORY,

No. 34432.

Date, October 13, 1915.

Sample Gypsite.

Received October 7, 1915.

Submitted by Mr. W. H. OSCHSNER, First National Bank Building, San Francisco.

Marked "station 400' S. W. 70° from Well #8."

# ANALYSIS.

Silica & Ins. ....10.09%

Alumina )

)AL<sub>2</sub>O<sub>3</sub>)—Fe<sub>2</sub>O<sub>3</sub>) .....1.20%

Iron Oxide)

Gypsum (CaSO<sub>4</sub>2(H<sub>2</sub>O)) .....83.33%

Calcium Carbonate (CaCO<sub>3</sub>) ..... 2.37%

Magnesium Carbonate (MgCO<sub>3</sub>) ..... 1.06%

---

Total.....98.05%

Respectfully submitted,

[Seal]

SMITH, EMERY & CO.

Chemists & Chemical Engineers.[810]

Mr. McWILLIAMS.—I now offer and read in evidence the affidavit of William B. Gester, subscribed and sworn to on the 16th day of October, 1915, before R. B. Treat, Notary Public.

(This affidavit is as follows:) [811]

**Defendants' Exhibit "Q" (Case No. A-37)—**

**Affidavit of William B. Gester.**

State of California,

City and County of San Francisco,—ss.

William B. Gester, being duly sworn, deposes and says: That he is a citizen of the United States and

a resident of Berkeley, California, and for more than forty-two (42) years last past has been engaged in the profession of a civil and mining engineer;

That affiant was educated at the College of the City of New York in the State of New York and ever since leaving college in 1873 has been engaged in the professions of civil and mining engineering;

That during that time affiant has been the manager of mines in different parts of California and Mexico, and for twelve (12) years last past has been the manager in the State of California of the firm of Robert W. Hunt & Co., engineers, who have headquarters in Chicago and branch offices in various parts of the United States, Mexico, Europe and South America;

That the firm of Robert W. Hunt & Co., is engaged in the business of civil, mining and chemical engineering a large part of its business consisting in testing materials and making analyses of all kinds of rock, stone, minerals and ores, including plasters, cements and kindred substances;

That affiant, on the 7th day of October, 1915, in company with Mr. T. S. Montgomery, Mr. F. H. Davis and Mr. M. C. Seagrave, visited the mining claim of the Devil's Den Consolidated Oil Company, consisting of the northeast quarter of Section thirty (30) township twenty-six (26) South, Range twenty-one (21) East, M. D. B. & M., in the County of Kern, California, about twenty-two (22) miles west of Wasco; that before proceeding to examine the mineral deposit on said claim, he examined the northeast corner of the Section and the [812] quarter-section corners on the north and east lines



of said Section thirty (30) for the purpose of verifying the description of the property; that he took compass-sights from the quarter-section corners in order to locate the west and south lines of said quarter-section;

That thereupon he, and the gentlemen with him, examined the cuts and excavations made on said land; he and they examined thirteen (13) of the cuts and excavations and took samples of the gypsum material exposed in said cuts and excavations, the details of which are as follows:

Trench A: About 500 feet due South from oil derrick marked "D. D. No. 1."

Trench B: About 20 feet East of Trench A.

Trench. C: About 20 feet East of Trench B.

These trenches are from 5 to 6 feet wide and the average cut is about 3 feet. There is about one and a half feet of stripping and about one and a half feet of gypsite exposed. The trenches are about 215 feet long.

Sample No. 1—Made up of hand samples taken from the northerly 50 feet of Trench B.

Sample No. 2—Taken from the next southerly adjoining 50 feet of Trench B.

Sample No. 3—Taken from the next southerly adjoining 50 feet of Trench B.

Sample No. 4—Taken from the southerly 65 feet of Trench B.

Sample No. 5—Made up of grab samples taken from the Section between points 100 and 150 feet south from the north end of Trench A.

Sample No. 6—Taken from Trench D located 120 feet northeast of the north end of Trench C.

Sample No. 7—Taken from Trench E located 300 feet easterly from the north end of Trench C.

Sample No. 8—Taken from Trench F located 150 feet northeast of derrick marked "D. D. NO. 5."

Sample No. 9—Taken from Trench G located 160 feet east from Trench F.

Sample No. 10—Taken from Trench H located about 300 feet easterly from Trench G.

Sample No. 11—Taken from Trench I located just westerly from the center of the east line of the northeast quarter of Section 30.

Sample No. 12—Taken from Trench J located about 600 feet southerly from Trenches A, B and C. [813]

Sample No. 13—Taken from Trench K located 100 feet southerly from Trench J.

Sample No. 14—Taken from Trench L located about 200 feet southerly from Trench K and also about 175 feet northerly from well marked: "D. D. No. 8."

Sample No. 15—Taken from a blanket deposit about 3 feet thick and sample No. 16 taken from a blanket deposit about 2 feet thick both of them found in a cellar hole about 9

feet square located at a point about 300 feet northwesterly from the southeast corner of the northeast quarter of Section 30.

Affiant took the samples above mentioned to his place of business at the chemical laboratory of Robert W. Hunt & Co., 251 Kearney Street, San Francisco, California, and there had the same analyzed under his direction; that the analyses of said samples showed the following results:

Mark.	Anhydrous Sulphuric Acid ( $\text{SO}_3$ )	Loss at Low Red Heat.	$\text{CaSO}_4$	Gypsum $\text{CaSO}_4 + 2\text{H}_2\text{O}$
#1	30.60%	17.38%	51.97%	65.79%
#2	32.55"	19.44"	56.98"	72.13"
#3	39.38"	20.48"	66.89"	84.67"
#4	35.67"	19.70"	60.59"	76.69"
#5	33.96"	20.06"	57.68"	73.01"
#6	37.87"	19.90"	64.32"	81.42"
#7	40.34"	20.32"	68.52"	86.73"
#8	33.96"	18.08"	57.68"	73.01"
#9	30.87"	16.96"	52.43"	66.37"
#10	33.13"	17.78"	56.28"	71.23"
#11	37.18"	19.90"	63.15"	79.94"
#12	37.11"	20.12"	63.03"	79.79"
#13	36.84"	19.94"	62.58"	79.21"
#14	28.74"	20.04"	48.81"	61.79"
#15	26.16"	19.20"	49.53"	62.69"
#16	34.30"	19.78"	58.26"	73.75"

[814]

Referring to the above analyses, affiant says:

That gypsum, by analysis, consists of one part of Calcium, one part of sulphur, four parts of oxygen

and two parts of water; the chemical symbol of which is  $\text{CaSO}_4 + 2\text{H}_2\text{O}$ ;

That gypsum-plaster used in commerce is composed of one part of sulphur and four parts of oxygen, and the symbol of this is  $\text{CaSO}_4$ ;

The symbol of anhydrous sulphuric acid is  $\text{SO}_3$ ;

Affiant further says that gypsite, the name commonly used in gypsum reports is an impure gypsum and frequently occurs as gypsum adulterated with clay and other foreign materials, or clay impregnated with gypsum; gypsum and gypsite generally occur in amorphous state when crystallized, the material is called "selenite";

The deposit on said northeast quarter of Section thirty (30) consists principally of gypsite with some selenite;

The analyses hereinabove given show the value of the deposits in pure gypsum and also the calcined plaster values;

Affiant further says that he is acquainted with the commercial gypsum and gypsite and the literature on gypsum and gypsum deposits;

Affiant has also examined many gypsum deposits in other parts of the state and in Mexico and he believes that the deposit of which that on the northeast quarter of Section thirty (30) forms a part, is one of the largest, if not the largest in the State of California;

Affiant says that to his knowledge commercial gypsum often runs as low as forty per cent. (40%) pure gypsum; that the deposits upon said northeast quarter of Section thirty (30), according to the de-

terminations made by him in his laboratory, are of a fairly high [815] quality and run from sixty-one and seventy-nine hundredths per cent (61.79%) to eighty-six and seventy-three hundredths (86.73%) per cent, and that the material and deposits are of good commercial value;

That the samples taken by said affiant from said land are fairly representative samples of the materials exposed such as would be taken by any mining or chemical engineer who wished to obtain the true value of the deposits;

Affiant further says that the nearness of this deposit to the cheap fuel oil supply of the neighboring oil field and the power lines at hand, and also the fact that the material in question lies very close to the surface, makes it possible to mine and prepare for market this gypsum at a very low cost;

Affiant estimates from indications of the mineral exposed in cuts and excavations upon said northeast quarter of Section thirty (30) that the amount of said material of the quality shown by above analyses in said northeast quarter of Section thirty (30) will be not less than four hundred thousand (400,000) tons.

(Signed) WM. B. GESTER.

Subscribed and sworn to before me this 16th day of October, 1915.

[Seal] (Signed) R. B. TREAT,  
Notary Public in and for the City and County of San Francisco, State of California. [816]

Mr. McWILLIAMS.—I offer the affidavit of M.



C. Seagrave, sworn to October 27, 1915, before R. B. Treat, Notary Public.

This affidavit is as follows [817]

**Defendants' Exhibit "R" (Case No. A-37)—  
Affidavit of M. C. Seagrave.**

State of California,  
City and County of San Francisco,—ss.

M. C. Seagrave, being first duly sworn, deposes and says:

I am the president and manager and the controlling owner of the Western Rock Products Company, a corporation, which corporation is engaged in the sale of limes, paving materials and fertilizers. I have been connected with the said company since about 1909; prior to that time I was connected with the Holmes Lime Company, which said company was engaged in the manufacture and sale of lime and plaster;

On or about the 7th day of October, 1915, in company with F. H. Davis, W. B. Gester and T. S. Montgomery, I visited the property of the Devil's Den Consolidated Oil Company, located on the northeast quarter (NE.  $\frac{1}{4}$ ) of Section thirty (30), township twenty-six (26) South, Range twenty-one (21) East, M. D. B. & M.

I first visited three trenches, near the northwest corner of said land. The said trenches are described as follows:

Trench A: About 500 feet due south from oil derrick marked "D. D. No. 1."

Trench B: About 20 feet east of Trench A.

Trench C: About 20 feet east of Trench B.

These trenches are from five (5) feet to six (6) feet wide and the average cut is about three (3) feet. There is about one and a half feet of stripping and about one and a half feet of gypsum exposed. The trenches are about two hundred fifteen (215) feet long.

Fair, representative samples of the gypsum were taken by me from the said land and labeled as follows: [818]

Sample No. 1—Made up of hand samples taken from the Northerly 50 feet of Trench B.

Sample No. 2—Taken from the next Southerly adjoining 50 feet of Trench B.

Sample No. 3—Taken from the next Southerly adjoining 50 feet of Trench B.

Sample No. 4—Taken from the Southerly 65 feet of Trench B.

Sample No. 5—Made up of grab samples taken from the section between points 100 and 150 feet south from the north end of Trench A.

Sample No. 6—Taken from Trench D, located 120 feet Northeast of the North end of Trench C.

Sample No. 7—Taken from Trench E, located 300 feet Easterly from the North end of Trench C.

Sample No. 8—Taken from Trench F, located 150 feet Northeast of derrick marked "D.D.No.5."

Sample No. 9—Taken from Trench G, located 160 feet east from Trench F.

Sample No. 10—Taken from Trench H, located about 300 feet easterly from Trench G.

Sample No. 11—Taken from Trench I, located just westerly from the center of the east line of the Northeast quarter of Section 30.

Sample No. 12—Taken from Trench J, located about 600 feet southerly from Trenches A, B, and C.

Sample No. 13—Taken from Trench K, located 100 feet southerly from Trench J.

Sample No. 14—Taken from Trench L, located about 200 feet southerly from Trench K and also about 175 feet northerly from well marked "D.D.No.8."

Sample No. 15—Taken from a blanket deposit about 3 feet thick and sample No. 16 taken from a blanket deposit about 2 feet thick, both of them found in a cellar hole about 9 feet square located at a point about 300 feet Northwesterly from a southeast corner of the Northeast quarter of said Section 30.

That the said samples were thereafter delivered by me to the Eaton Laboratories, chemists and bacteriologists situated in San Francisco, California, with instructions to analyze the same; [819] that a copy of the analysis made by the said Eaton Laboratories is as follows:

Lab. No.	Field No.	SO <sub>3</sub>	Water	Gypsum
10125	1 DD	28.75%	14.50%	61.80%
10126	2 DD	37.05	18.22	79.60
10127	3 DD	40.15	19.23	86.20
10128	4 DD	37.40	18.35	80.30
10129	5 DD	35.40	18.77	76.10
10130	6 DD	40.85	19.11	87.80
10131	7 DD	41.12	19.66	88.30
10132	8 DD	36.40	17.84	78.25
10133	9 DD	32.40	15.64	69.60
10134	10 DD	33.55	16.89	72.00
10135	11 DD	37.50	18.72	80.60
10136	12 DD	26.50	17.12	57.00
10137	13 DD	35.20	18.40	75.65
10138	14 DD	32.95	18.86	70.80
10139	15 DD	25.85	18.05	55.50
10140	16 DD	33.75	18.50	72.50

Referring to the above analyses, I would state that gypsum, by analysis, consists of one part of Calcium, one part of sulphur, four parts of oxygen and two parts of water; the chemical symbol of which is  $\text{CaSO}_4-2 \text{H}_2\text{O}$ ; the symbol of anhydrous sulphuric acid is  $\text{SO}_3$ ; the field numbers correspond to my sample numbers.

The openings from which samples one to fourteen, inclusive, were taken, practically all show gypsum in the bottom.

The deposit of gypsum contained on the said land is a lake deposit and all of the ground within the said quarter-section is covered by this blanket of gypsum, except where erosion has lowered the level of the ground to an estimated depth of over five





EXHIBIT "A."

University of California,  
College of Agriculture,  
Berkeley.

AGRICULTURAL EXPERIMENT STATION.

Benj. Ide Wheeler, President,  
Thomas Forsyth Hunt, Dean and Director,  
H. E. Van Norman, Vice-Dir. and Dean University  
Farm School.

CIRCULAR No. 111.

December, 1913.

THE USE OF LIME AND GYPSUM ON CALI-  
FORNIA SOILS.

By Chas. B. Lipman.

Much confusion exists in the popular mind with reference to the actual nature of lime and its use. The following brief statements are intended to clear up difficulties which exist and to reply to frequently recurring questions on the important subjects of lime and its use and gypsum and its use.

*The Nature and Functions of Lime.*

The term "lime," as we may employ it in the agricultural sense, includes the following materials: Burnt lime (oxide of calcium), hydrated or water-slaked lime (hydrate of calcium), ground limestone or air-slaked lime (carbonate of calcium). *Even in the agricultural sense the term lime does not include gypsum.* The latter is an entirely different substance from the three named above, as will be explained later. Speaking with the correctness of the chemist the term "lime" is applied only to burnt

lime (quicklime) or calcium oxide. Just how the three materials discussed agriculturally under the name lime are to be employed and where one is to be preferred to the other, if at all, are questions which are answered below.

Before going into a detailed description of the mission or the function of lime in soils it is well to state clearly the relative values for practice of (1) the burnt, caustic, or quicklime; (2) the hydrated or water-slaked lime, and (3) the carbonate [822] of air-slaked lime. These lime materials are largely valued for the amount of calcium oxide which they contain. Quicklime is nearly all calcium oxide. Hydrated lime or water-slaked lime contains less calcium oxide *by* may be looked upon in practice as nearly equivalent ton for ton to the quicklime. Air-slaked lime (like the ground limestone) or carbonate of lime contains only a little more than half the amount of calcium oxide that the quicklime does and therefore two tons of it should be employed if it is used in place of the caustic form. The relative money values can be determined at any time from the foregoing explanation of relationship between the different lime materials. It must also be remembered in that connection, however, that the cost of handling larger quantities and additional freight rates involved must always be taken into consideration in calculating the actual and relative cost of the different materials. The following is a consideration of the function of lime materials in soils:

1. Lime materials have the power of shrinking clay and making it more pervious to water and air,

by making a large number of crumbs from large sticky masses. Therefore, lime makes clays and clay adobe soils looser, prevents their packing, baking and cracking, makes plowing and cultivating easier, and, in general, makes the soil, physically, a healthier medium for plant growth.

2. Lime materials (as above described) serve as a source of the element calcium to plants. Calcium is one of the ten essential chemical elements in plant growth.

3. Lime materials make "sour" soils "sweet." Speaking correctly, they change an acid soil condition to a slightly alkaline one. Acidity of soils is very detrimental to the growth of many agricultural crops. A slightly alkaline condition is ideal for them.

4. Lime materials are necessary for useful and beneficial bacteria and other micro-organisms of the soil. It furnishes these [823] the element calcium, which is as essential to them as to the higher plants. It promotes a slightly alkaline condition which is ideal for their development. By its physical effects lime produces good air and moisture conditions for bacteria as above described.

5. Lime materials promote the normal decay of soil organic matter through their effects on the agencies of decay above described. The normal decay of organic matter in soil prevents accumulation of poisonous materials in soils which are detrimental to plant growth.

6. Lime will not neutralize sodium carbonate or black alkali.

*The Nature and Function of Gypsum.*

Gypsum is the sulphate of calcium and therefore is not the same as "lime" nor the same as any of the three forms of the latter above described. The only thing which gypsum has in common with the three lime materials named, from the point of view of chemical composition is that it, like the others, contains the element calcium. Let us study its functions in soils.

1. Gypsum exerts a similar effect to that of lime on the clay and adobe soils (see above).

2. Gypsum, like lime, serves as a source of the element calcium (see above).

3. Gypsum, like lime, stimulates the beneficial soil organisms on the roots of leguminous plants like the peas, beans, vetches, alfalfas and clovers.

4. *Gypsum does not make "sour" soil "sweet." It will not change an acid into a slightly alkaline soil as do the lime materials. Gypsum is a neutral salt (possesses no alkalinity), and therefore will not be of assistance, or act as a corrective to a "sour" or acid soil. [824]*

5. Gypsum does not share with lime, to any appreciable extent, the good effects of the latter on soil organic matter (see above).

6. Gypsum will neutralize sodium carbonate or "black" alkali.

*Lime versus Gypsum.*

The question comes to us so frequently as to whether "lime or gypsum" will correct a certain difficulty in soils. This confusion of two distinct types of substances has done much harm, and the

reader is asked to read carefully the statements made above, with respect to each in order that errors may be obviated. As above noted there are at least two very important functions which lime performs in the soil which gypsum cannot perform. If soils need correction for acidity, or it is desired to promote normal decay of organic matter only, the lime materials will do and not the gypsum. Too much emphasis cannot be placed on this distinction. In fact, to be on the safe side the use of lime is advised even in cases in which people with exact information might, perhaps, give the preference to gypsum. The distinct and limited uses for gypsum are below described, however, to serve as a guide.

#### *Lime on Heavy Soils.*

No determination needs to be made to inform the owner of heavy land if lime is necessary to improve its texture as above described. The decision both as to the amount to apply and as to the feasibility of applying it must be made on the basis of the cost of lime and the degree of "running together" or baking and cracking, which is characteristic of the soil. From one to two tons of the burnt lime or of the hydrated lime, or from two to four tons of the ground limestone may be safely applied to improve the [825] working qualities of heavy soils. Application may be made by means of one of the several types of lime spreading machines or the lime may be deposited in piles and spread with a shovel. It should be well plowed in and covered up at a time when there is sufficient moisture in the soil for the lime to act well.



The burnt lime or the hydrated lime is to be preferred to the carbonate of lime for making heavy soils lighter if the cost will allow. The first two forms act more vigorously and more quickly. Applications of lime are best made prior to fall or winter plowing or several months prior to planting. This must particularly be borne in mind if either burnt lime or hydrated lime are employed.

*Lime on "Sour" or Acid Soils.*

If "sour" soils are also heavy clays or clay adobes, the recommendations for the use of lime above made for heavy soils are to be followed. If sour soils are loams, silts or sands, the ground limestone is to be preferred to the other forms of lime where it is obtainable.

To test your soil for sourness or acidity proceed as follows: Mix some of the surface soil to be tested and moisten thoroughly. Mold it into a ball of wet earth about three or four inches in diameter. Break the ball in two and on one of the broken surfaces place two strips of red litmus paper previously moistened with clean boiled water. (Litmus paper, both red and blue, may be obtained in the drug stores.) Set the broken surfaces of earth together again and press tightly. Perform the same test with another ball of earth, but use the blue instead of red litmus paper. Allow the balls of earth to lie undisturbed for half an hour; then open, and if the red litmus paper has turned blue no lime is needed. If it remains red, and the blue litmus paper turns red, lime is needed and should be applied as above directed. If neither the red nor the blue litmus

paper should change color during half an hour or [826] more, then the reaction of the soil is neutral and small applications of ground limestone, not to exceed one ton per acre, will be sufficient.

*When and How Gypsum May be Used.*

Gypsum may be used to good advantage on alfalfa fields to stimulate the growth of the plants. This is especially to be remembered in connection with alfalfa fields of several years standing in which bald spots or bare patches are found. An application of gypsum in such cases, not to exceed 300 or 400 pounds to the acre, along with fall disking, will give striking stimulation to the plants and rejuvenate the field itself and to the nitrogen gathering bacteria which grow in the nodules on its roots.

If lime is very expensive, as it may be in some districts of this State, gypsum, if much cheaper, may also be used as indicated above, to lighten heavy soils. Applications varying from one-half ton to one ton per acre may be used in such cases.

Another use for gypsum, which is more limited, consists in applying it to "black alkali" land to neutralize or make harmless the black alkali. In this respect gypsum cannot be replaced by lime. The amounts to be used in such cases will depend upon the amount of black alkali present in the soil. This must be determined for those interested by the Experiment Station, which should be communicated with under such circumstances. [827]

Mr. McWILLIAMS.—I offer the affidavit of R. O. Wrana, subscribed and sworn to the 15th day of

October, 1915, before H. H. Harris, Notary Public in and for Los Angeles County, California.

(This affidavit was read in evidence and is as follows:) [828]

**Defendants' Exhibit "S" (Case No. A-37)—  
Affidavit of R. O. Wrana.**

State of California,  
County of Los Angeles,—ss.

R. O. Wrana, being first duly sworn, deposes and says: That he is a resident of the City of Los Angeles, County of Los Angeles, State of California; that he is an analytical and consulting chemist; that he received his professional education in the University of Vienna, Austria; after his graduation from the University of Vienna, he was appointed as first assistant chemist in the Department of the Interior of the Austrian Government, and was detailed to the secret service or State police as it is there termed; that at different times he was detailed to other departments, to wit, to the Food Commission and the municipal police, and as chemist in the Criminal Courts and in the higher courts of Austria; that he visited, in his professional capacity the Galatin Oil Fields, and Baku Oil Fields of South Russia, and was professionally connected with work in the refineries in said oil fields; that he came to California in October, 1907, since which time he has been employed as a chemist by Smith, Emery & Company, Dr. Salathe and others; that in January, 1912, he entered the firm of Wrana, King and Company as a member thereof and ever since has been a member

of said firm; that he is or has been consulting chemist for various refineries, for the Atchison, Topeka & Santa Fe Railway Company, the Pacific Sewer Pipe Company, the China Manufacturing Company, the Valvoline Oil Company, the Salt Lake and San Pedro Railroads and for other companies;

That on October 2d and 3d, 1915, affiant visited the northeast quarter of Section 30, Township 26 South, Range 21 East M. D. M., situated in Kern County, California, for the purpose of examining deposits of gypsum on said land, and also for the purpose of taking samples from said deposits for the purpose of analysis; [829] that the following is a correct description of the samples taken by him from said land, together with the correct analysis of each of said samples:

Sample No. 1, Laboratory No. 2400 is a sample of gypsum taken from a cut near the center of the south line of the northwest quarter of the northwest quarter of the northeast quarter of said Section 30 and represents a fair surface sample of a deposit of gypsum, which affiant found situated about one foot from the general surface of the ground and extending down from 11½ to 21½ feet in thickness; that thereafter affiant analyzed said sample and found that it contained 86 per cent gypsum as per the following analysis:

Water (H <sub>2</sub> O) at 60°C.....	0.40%
Water (H <sub>2</sub> O) at 300°C.....	20.75%
Calcium oxyde (CaO) .....	27.77%
Sulphuric anhydride (SO <sub>3</sub> ).....	37.00%
Insoluble .....	12.18%

Iron & Alum. oxydes ( $R_2O_3$ ) .....	1.67%
Chlorine (Cl) .....	0.13%
Gypsum .....	86.00%

Sample No. 2 Laboratory No. 2401, was taken from the same cut and near the same point and from the same deposits as that from which sample No. 1 was taken; that thereafter affiant analyzed sample No. 2 and found same to contain 87 per cent gypsum as per the following analysis:

Water ( $H_2O$ ) at $60^\circ C$ .....	0.50%
Water ( $H_2O$ ) at $300^\circ C$ .....	20.95%
Calcium oxyde ( $CaO$ ) .....	27.89%
Sulphuric anhydride ( $SO_3$ ) .....	37.26%
Insoluble .....	12.10%
Iron & Alum. oxydes ( $R_2O_3$ ) .....	1.15%
Chlorine (Cl) .....	0.06%
Gypsum .....	87.00%

Sample No. 3, Laboratory No. 2402, was taken from the southwest quarter of the northwest quarter of the northeast quarter of said Section 30, from the same cut as samples number 1 and 2 and from the same deposit; that thereafter affiant analyzed said sample [830] No. 3 and found it to contain 90 per cent gypsum, as follows:

Water ( $H_2O$ ) at $60^\circ C$ .....	0.44%
Water ( $H_2O$ ) at $300^\circ C$ .....	20.56%
Calcium oxyde ( $CaO$ ) .....	27.77%
Sulphuric anhydride ( $SO_3$ ) .....	41.38%
Insoluble .....	6.90%
Chlorine (Cl) .....	0.11%
Gypsum .....	90.00%



Sample No. 4, Laboratory No. 2403, was taken from near the same point as sample No. 3 and from the same deposit but from the upper portion of said deposit, and was so taken to determine the difference; that thereafter affiant analyzed sample No. 4 and found it to contain 84 per cent gypsum, as follows:

Water ( $\text{H}_2\text{O}$ ) at $60^\circ\text{C}$ .....	0.54%
Water ( $\text{H}_2\text{O}$ ) at $300^\circ\text{C}$ .....	18.16%
Calcium oxyde ( $\text{CaO}$ ) .....	29.46%
Sulphuric anhydride ( $\text{SO}_3$ ).....	36.32%
Insoluble .....	11.80%
Iron & Alum. oxydes ( $\text{R}_2\text{O}_3$ ).....	1.20%
Chlorine ( $\text{Cl}$ ) .. .. .	0.06%
Gypsum .....	84.00%

Sample No. 5, Laboratory No. 2404, was taken from a sack of gypsum, it being one of about three or four hundred sacks of material which had apparently been sacked some years ago and left standing on the ground; unprotected from the weather, and also which were apparently mined from long cuts or trenches situated near the center of the west half of the northwest quarter of the northeast quarter of said Section 30; that thereafter affiant analyzed said sample No. 5, and found that it contained 78 per cent gypsum, as follows:

Water ( $\text{H}_2\text{O}$ ) at $60^\circ\text{C}$ .....	0.62%
Water ( $\text{H}_2\text{O}$ ) at $300^\circ\text{C}$ .....	18.38%
Calcium oxyde ( $\text{CaO}$ ) .....	23.20%
Sulphuric anhydride ( $\text{SO}_3$ ).....	35.36%
Insoluble .....	18.30%
Iron & Alum. oxyde ( $\text{R}_2\text{O}_3$ ).....	1.48%
Chlorine ( $\text{Cl}$ ) .....	0.10%
Gypsum .....	78.00%

Sample No. 6, Laboratory No. 2405, affiant took from a trench situated a little east of the center of the east half of [831] the northwest quarter of the northeast quarter which said trench showed a deposit of gypsum at least 2 feet thick and lying parallel with the surface of the ground; that trench not being dug to the bottom of the deposit of gypsum, affiant is unable to state its exact thickness; that thereafter affiant made an analysis of sample No. 6 and found it to contain 87 per cent gypsum, as follows:

Water ( $\text{H}_2\text{O}$ ) at $60^\circ\text{C}$ .....	0.32%
Water ( $\text{H}_2\text{O}$ ) at $300^\circ\text{C}$ .....	20.20%
Calcium oxyde ( $\text{CaO}$ ) .....	29.00%
Sulphuric anhydride ( $\text{SO}_3$ ).....	37.26%
Insoluble .....	11.40%
Iron & Alum. oxydes ( $\text{R}_2\text{O}_3$ ).....	1.50%
Chlorine ( $\text{Cl}$ ) .....	0.11%
Gypsum .....	87.00%

Sample No. 7, Laboratory No. 2406, was taken from a shallow trench about 100 yards west and probably 25 yards north of the trench from which sample No. 6 was taken, which trench showed a deposit of gypsum at least two feet in thickness, but not being dug to the bottom of said deposit, affiant cannot state the exact thickness thereof; that thereafter affiant made an analysis of said sample No. 7 and found it contained 73 per cent gypsum, as follows:

Water ( $\text{H}_2\text{O}$ ) at $60^\circ\text{C}$ .....	0.34%
Water ( $\text{H}_2\text{O}$ ) at $300^\circ\text{C}$ .....	18.96%
Calcium oxyde ( $\text{CaO}$ ) .....	22.62%

Sulphuric anhydride ( $\text{SO}_3$ )	31.48%
Insoluble	24.54%
Iron & Alum. oxydes ( $\text{R}_2\text{O}_3$ )	1.70%
Chlorine (Cl)	0.05%
Gypsum	73.00%

Sample No. 8, Laboratory No. 2407, was taken from a trench in the northwest quarter of the southwest quarter of the northeast quarter which disclosed a deposit of gypsum at least 18 inches thick, but the trench was not dug down to the bottom of the deposit and affiant cannot state its exact thickness; that thereafter affiant made an analysis of said sample No. 8, and found it contained 95 per cent gypsum, as follows: [832]

Water ( $\text{H}_2\text{O}$ ) at $60^\circ\text{C}$	0.34%
Water ( $\text{H}_2\text{O}$ ) at $300^\circ\text{C}$	20.06%
Calcium oxyde ( $\text{CaO}$ )	32.02%
Sulphuric anhydride ( $\text{SO}_3$ )	42.84%
Insoluble	2.60%
Iron & Alum. oxydes ( $\text{R}_2\text{O}_3$ )	0.80%
Chlorine (Cl)	0.06%
Gypsum	95.00%

Sample No. 9, Laboratory No. 2408, was taken from a trench about 75 feet northerly from the place where sample No. 8 was taken and about eight feet below the horizon of the deposit from which said sample 8 was taken; said sample 9 was from a deposit of gypsum in crystals, so-called selenite; that this deposit of gypsum in crystals, or selenite, appears to underly the earthy gypsum, or softer variety, wherever it occurs, on the land in controversy; that thereafter affiant made analysis of said sample

No. 9 and found it to contain 98 per cent gypsum, as follows:

Water ( $\text{H}_2\text{O}$ ) at $60^\circ\text{C}$ .....	0.10%
Water ( $\text{H}_2\text{O}$ ) at $300^\circ\text{C}$ .....	20.60% <sup>1</sup>
Calcium oxyde ( $\text{CaO}$ ) .....	31.80%
Sulphuric anhydride ( $\text{SO}_3$ ).....	44.58% <sup>1</sup>
Insoluble .....	1.80%
Chlorine ( $\text{Cl}$ ) .....	0.05%
Iron & Alum. oxydes ( $\text{R}_2\text{O}_3$ ).....	0.76% <sup>1</sup>
Gypsum .....	97.00%

Sample No. 10, was taken from a trench located about 80 feet southerly from that in which sample No. 8 was taken, said sample No. 10 being taken from a shallow trench about 18 inches in depth, disclosing a deposit of gypsum at least 12 inches in thickness, but the trench not being dug to the bottom of the deposit, affiant cannot give its exact thickness; that thereafter affiant analyzed said sample No. 10, and found it to contain 79 per cent gypsum, as follows:

Water ( $\text{H}_2\text{O}$ ) at $60^\circ\text{C}$ .....	0.16%
Water ( $\text{H}_2\text{O}$ ) at $300^\circ\text{C}$ .....	17.90% <sup>1</sup>
Calcium oxyde ( $\text{CaO}$ ).....	26.10%
Sulphuric anhydride ( $\text{SO}_3$ ).....	35.08%
Insoluble .....	16.36% <sup>1</sup>
Iron & Alum. oxydes ( $\text{R}_2\text{O}_3$ ).....	2.64%
Chlorine ( $\text{Cl}$ ).....	0.06%
Gypsum .....	79.00% <sup>1</sup>

[833]

Sample No. 12, Laboratory No. 2411, was taken from a cut near the center of the northeast quarter of the northeast quarter which cut disclosed a deposit of gypsum about 18 inches thick, but the trench

not being dug to the bottom of said deposit, affiant is unable to state its exact thickness; that thereafter affiant analyzed said sample No. 12 and found it to contain 81 per cent gypsum, as follows:

Water ( $\text{H}_2\text{O}$ ) at $60^\circ\text{C}$ .....	0.60%
Water ( $\text{H}_2\text{O}$ ) at $300^\circ\text{C}$ .....	17.40%
Calcium oxyde ( $\text{CaO}$ ).....	26.04%
Sulphuric anhydride ( $\text{SO}_3$ ).....	35.08%
Insoluble .....	17.20%
Iron & Alum. oxydes ( $\text{R}_2\text{O}_3$ ).....	2.60%
Chlorine ( $\text{Cl}$ ) .....	0.08%
Gypsum .....	81.00%

Sample No. 13, Laboratory No. 2412, was taken from the surface of the ground near a pit dug close to the southeast corner of the northeast quarter of said Section 30; that thereafter affiant analyzed said sample and found that it contained 68 per cent gypsum, as follows:

Water ( $\text{H}_2\text{O}$ ) at $60^\circ\text{C}$ .....	1.10%
Water ( $\text{H}_2\text{O}$ ) at $300^\circ\text{C}$ .....	19.20%
Calcium oxyde ( $\text{CaO}$ ).....	25.64%
Sulphuric anhydride ( $\text{SO}_3$ ).....	31.96%
Insoluble .....	16.80%
Iron & Alum. oxydes ( $\text{R}_2\text{O}_3$ ).....	5.14%
Chlorine ( $\text{Cl}$ ) .....	0.05%
Gypsum .....	68.00%

Sample No. 14, Laboratory No. 2413, was taken from the top of the dump from the pit last above mentioned; that an examination of said pit showed it to be ten feet square and about ten feet deep and that the material on the dump, from which said sample No. 14 was taken, came from a depth of ten feet



in said pit and was composed of gypsum in crystals; that thereafter affiant analyzed said sample No. 14 and found that it contained 91 per cent gypsum as follows: [834]

Water ( $\text{H}_2\text{O}$ ) at $60^\circ\text{C}$ .....	0.16%
Water ( $\text{H}_2\text{O}$ ) at $300^\circ\text{C}$ .....	19.34%
Calcium oxyde ( $\text{CaO}$ ).....	29.68%
Sulphuric anhydride ( $\text{SO}_3$ ).....	41.88%
Insoluble .....	6.50%
Iron & Alum oxydes ( $\text{R}_2\text{O}_3$ ).....	0.20%
Chlorine ( $\text{Cl}$ ) .....	0.05%
Gypsum .....	91.00%

Sample No. 15, Laboratory No. 2414, is a composite sample of specimens selected all over the said north-east quarter of Section 30, exclusive of trenches and points from which samples numbers 1 to 14 were taken; that affiant analyzed said sample No. 15, and found that it contained 89 per cent gypsum, as follows:

Water ( $\text{H}_2\text{O}$ ) at $60^\circ\text{C}$ .....	0.30%
Water ( $\text{H}_2\text{O}$ ) at $300^\circ\text{C}$ .....	19.40%
Calcium oxyde ( $\text{CaO}$ ).....	30.24%
Sulphuric anhydride ( $\text{SO}_3$ ).....	39.36%
Insoluble .....	6.00%
Iron & Alum Oxydes ( $\text{R}_2\text{O}_3$ ).....	2.90%
Chlorine ( $\text{Cl}$ ) .....	1.06%
Gypsum .....	89.00%

That the trenches, pits and workings of said land show that practically all of said land, with the exception of certain eroded portions, where a broad gulley or wash is located east and west across said northeast quarter, and near the center thereof, is

underlayed with a series of strata of gypsum, the upper strata of which lies at or near the surface and is composed of massive gypsum, sometimes called gypsum earth and sometimes called gypsite, but properly called gypsum, or earthy gypsum; that said deposit varies in thickness from 15 inches to over 30 inches and is seldom found at a greater depth than 12 inches from the surface so that the over-burden could readily be removed by scrapers and teams and the gypsum mined economically and expeditiously by means of scrapers and teams; that below said upper deposit of gypsum are found other strata of greater or less purity and particularly stratum of gypsum crystals which generally underlies the earthy [835] gypsum, sometimes separated by a stratum of impure material, and these gypsum crystals contain some impurities but said impurities can be readily removed by mechanical means; that there is no ten-acre subdivision of said northeast quarter of Section 30 so that does not contain valuable deposits of gypsum of sufficient extent and purity to be practically valuable for commercial purposes; that the gypsum crystals such as those analyzed as above stated is suitable for the manufacture of finer plasters, as, for instance, plaster of paris and also for other plasters not requiring absolutely pure material; that there are large deposits of gypsum on said northeast quarter of Section 30 of sufficient purity to be used in the manufacture of cements and plasters and for use as land plaster or fertilizer, some of which deposits may be found on each ten-acre subdivision thereof.

That the samples above taken, except sample 15, were fair samples of the deposits found at the points where the respective samples were taken and were taken with a view of determining the general quality of the various gypsum deposits on said northeast quarter of Section 30; that sample No. 15 was a composite sample taken from the various parts of the land above indicated with a view of determining the general average purity of the deposits on said land at points not covered by the above individual samples.

R. O. WRANA.

Subscribed and sworn to before me this 15th day of October, A. D. 1915.

[Seal]

H. H. HARRIS,  
Notary Public in and for the County of Los Angeles,  
State of California.

My commission expires June, 1918. [836]

Mr. McWILLIAMS.—I offer the affidavit of T. S. Montgomery, subscribed and sworn to before W. W. Healey, Notary Public of this City and County, on the 19th of June, 1916.

(This affidavit reads as follows:) [837]

**Defendants' Exhibit "T" (Case No. A-37)—  
Affidavit of T. S. Montgomery.**

State of California,  
City and County of San Francisco,—ss.

T. S. Montgomery, being first duly sworn, deposes and says:

I am the superintendent of the Pacific Portland Cement Company, Consolidated, a corporation en-

gaged in the manufacture of cement, plaster and gypsum products; I have actual charge of the physical and laboratory work of that company; I received my education at the University of Pennsylvania, of which institution I am a graduate;

I submit herewith the results of certain investigations made by me of gypsum and gypsite deposits located on the lands of the Devil's Den Consolidated Oil Company, situated on the northeast quarter (NE.1/4) of Section thirty (30), Township twenty-six (26) south, range twenty-one (21) east, M. D. B. & M.;

The said property is cut through by a small canon dividing the property into two high portions which for convenience I shall term ridges. On these ridges there have been dug a great many trenches for the purpose of exposing the gypsum, and wherever a trench has been dug, or in fact wherever any excavations have been made for any depth over two (2) feet the gypsum has been exposed. It is not to be found, however, in the canons, as the process of erosion which formed the canon naturally carried away the gypsum, which was probably deposited on level land and the result of a periodic lake deposit. Practically all of the trenches show the same formation, namely, about eighteen (18) inches of top soil or stripping mixed with gypsum and then the main body of gypsum appears. All the trenches dug show about eighteen inches of gypsum.

In one trench, underneath the gypsum there was a well-defined formation of selenite crystals intermingled with finely [838] divided sandy material.

At one particular place on the property there is exposed quite an amount of this selenite formation, and about three hundred (300) feet northwest from the said northeast quarter corner in the east line of Section thirty (30) there is a cellar hole which had been dug for some building which has not been erected. This hole shows about a few inches of stripping, then two feet of gypsum, then three feet of selenite crystals intermingled with sandy material, then two feet of sandy material intermixed with selenite crystals, then silicious sedimentary material laid down in ledge formation.

On the attached sheet, marked Exhibit "A" are set forth the results of the analyses made under my direction from samples of the said gypsum taken by me from the said land. The said samples so taken were fair, representative samples of the body of gypsum on the said land.

Sample No. 1. There are three main trenches on the said land running approximately north and south about five hundred (500) feet due south of Devil's Den Consolidated Oil Company's Derrick No. 1. They are from five (5) feet to six (6) feet wide and about three (3) feet deep, showing stripping, averaging eighteen (18) inches, and gypsum averaging eighteen (18) inches, with gypsum in the bottom of the trenches. The trenches are about two hundred fifteen (215) feet long. These trenches for convenience I shall call A, B and C. I first sampled trench B. Sample No. 1 represents the north fifty (50) feet of trench B. Sample No. 2, the second fifty (50) feet working south. Sample No. 3 the third fifty (50)



feet working south. Sample No. 4 the fourth or the remainder of trench B. Trenches A, B and C are about fifteen (15) feet apart.

Sample No. 5 represents the selenite crystalline formation, which appears in trench A for a distance of about fifty (50) [839] feet, and underlies gypsite. I began sampling about one hundred fifty (150) feet from the north end of trench A. Sample No. 6 was taken from a trench which I shall call D, and which runs east and west, and is about one hundred twenty (120) feet northeast from the north end of trench C. This particular trench is about forty (40) feet long.

Sample No. 7 was taken from a trench running east and west and about three hundred (300) feet east from the north end of trench C and about one hundred (100) feet west of Devil's Den Consolidated Oil Company's Derrick No. 5. Sample No. 8 was taken from a trench northeast of Devil's Den Consolidated Oil Company's Derrick No. 5, which I shall call trench F.

Sample No. 9 was taken from trench G, which is one hundred sixty (160) feet east of trench F. Sample No. 10 was taken from trench H, which is about three hundred (300) feet east from trench G. Sample No. 11 was taken from a trench midway from the east line of the said northeast quarter, which I shall call trench I. Sample No. 12 was taken south across the ravine about six hundred (600) feet from trenches A, B and C, and which I shall call trench J.

Sample No. 13 was from a trench one hundred (100) feet south from J, which I shall call K. No. 14 from a trench two hundred (200) feet south of

K, which I shall call L. Sample 15 represents the selenite crystalline formation and is taken from cellar hole about three hundred (300) feet northwest from the said northeast quarter line and the east line of Section thirty (30). No. 16 represents about two (2) feet of gypsite overtopping the selenite formation represented by sample No. 15.

The material examined divides itself at first hand into two distinct formations. Samples 1, 2, 3, 4, 6, 7, 8, 9, [840] 10, 11, 13 and 16 represent gypsum and are typical of one formation. Samples 5, 12, 14 and 15 represent a formation consisting of finely divided selenite crystals, intermingled with silicious or sandy material, which is in a fine state of subdivision. Samples 5-A, 12-A, 14-A and 15-A represent the selenite crystals screened free from the silicious matter.

The gypsites vary in purity, considered from a gypsum value standpoint, from 60.6 to 86.9. This material could be used commercially as land plaster and as a retarder in the manufacture of cement. The lowest sample of gypsite which I obtained was sample No. 1 with a gypsum value of 60.6. The highest gypsite value I obtained was 86.9. Even the lowest of this material sampled is higher than material sampled by me and which was sold in the open market in the San Joaquin Valley by the Pacific Cement Plaster Company, which operates a plant at Amboy, California. This material was called by the Pacific Cement Plaster Company No. 6 land plaster. It analyzed as follows:

Silica .....	28.96
Ferric Oxide .....	1.27
Alumnia .....	5.05
Magnesia Oxide .....	2.92
Calcium Carbonate .....	1.08
Water .....	12.47
Calcium Sulphate .....	47.40
Gypsum Value .....	59.87
Salt .....	1.25

The Pacific Cement Plaster Company also markets a higher grade of land plaster which it calls No. 4, which analyzes as follows:

Silica .....	5.76
Ferric Oxide .....	.40
Alumnia .....	3.04
Magnesia Oxide .....	.57
Lime Carbonate .....	.50
Water .....	16.55
Calcium Sulphate .....	72.99
Gypsum Value .....	89.54
Salt .....	.11

[841]

Samples 5, 12, 14 and 15 taken by me from said tract above described, represent the formation which I have termed the selenite crystalline formation intermingled with silicious material. This material is almost an exact counterpart of the material found in the Mojave Desert near Amboy, a station on the Santa Fe in San Bernardino County, about 225 miles from Los Angeles, and from which the Pacific Cement Plaster Company produces land plaster and wall plaster.

The material of said Pacific Cement Plaster Com-

pany at this place is overlaid with about two (2) feet of stripping which is removed by scrapers, the underlying crystalline formation is plowed and then scraped up with scrapers, taken to the mill and dried, subjected to suction fans, where the finest material is removed, then passed over screens and again subjected to the action of the fans. By this means that company removes the fine silicious material, leaving behind the crystals of selenite or gypsum.

Samples 5, 12, 14 and 15, taken by me as aforesaid, I caused to be passed through a 10-mesh screen, and the material which was retained on the 10-mesh screen was analyzed and designated respectively 5-A, 12-A, 14-A, and 15-A. Sample No. 5 when passed through a 10-mesh screen showed a residue of 52.7% left on the screen. The remainder which passed through consisted of silicious material and finely divided selenite crystals. Time did not allow the further segregation of the material which passed through the 10-mesh screen, but by means of air separators considerable selenite could be separated.

Sample No. 12 when screened through the 10-mesh left a residue of 64.4% on the 10-mesh screen. Sample No. 14 gave a residue of 41.7% on the 10-mesh screen. Sample No. 15 gave a residue of 56.7% on the 10-mesh screen. [842]

From this work I conclude that over 50% of this material when passed through a 10-mesh screen would be finely divided selenite crystals, with a gypsum value averaging a little higher than 83%. Thus by one mechanical operation a gypsum could be obtained from which a land plaster would be derived which would compare favorably with many

of the land plasters now on the market. This material, moreover, would be most acceptable in cement mills as a retarder in the manufacture of Portland Cement.

The winning of this material would be a very easy problem inasmuch as the top soil does not average over eighteen inches and could be easily removed by scrapers, and the many adjacent ravines lend themselves for dumping grounds. The gypsum would merely have to be plowed up and scraped over a trap into cars, perhaps the cheapest form of quarrying known. The selenite crystalline formation could be handled in exactly the same way.

Assuming that not more than one-half of the said tract of land above described contains gypsum, there would be available not less than four hundred thousand (400,000) tons which could be profitably marketed.

The completion of the Kern County highway now under construction between Wasco and the Lost Hills will afford facilities for cheap transportation by motor truck of this material to a market which requires at this time large quantities of this material. The fact that cheap fuel, due to the adjacent oil fields, and the fact that transmission lines carrying electric power at very low rates are now available on the ground will enable this property to operate at a low cost.

T. S. MONTGOMERY.

Subscribed and sworn to before me this 16th day of October, 1915.

[Seal]

W. W. HEALEY,

Notary Public in and for the City and County of  
San Francisco, State of California. [843]



## WASCO SAMPLES—10/14/15.

No.	Class.	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	MgO	H <sub>2</sub> O		CaCO <sub>3</sub>	H <sub>2</sub> O Comb	CaSO <sub>4</sub>	Gypsum		Remarks
						Free					Value	Total	
1	Gypsite	33.30	.81	1.69	.94	.63		1.55	12.65	47.95	60.60	99.52	
2	"	18.20	.69	.97	.61	.35		1.27	16.32	61.84	78.16	100.25	
3	"	13.70	.61	.93	.79	.12		1.41	17.27	65.44	82.71	100.27	
4	"	15.60	.61	1.27	.72	.63		2.57	16.18	61.56	77.74	99.21	
5	Selenite	21.12	1.31	2.83	1.63	1.50		.36	14.75	55.90	70.65	99.40—Sample as received,	
5-A	"	12.80	.65	2.21	.65	.61		1.32	16.97	64.27	81.24	99.48—Residue from #5 on 10-mesh	
6	Gypsite	10.00	.73	.39	.72	—		3.69	16.99	An-3.40	81.21	100.14	
7	"	8.80	.65	.15	.68	—		1.46	18.39—	64.22			
									(	68.51			
8	"	26.50	.73	.77	.93	.40		.66	14.44	(An-1.39	86.90	100.03	
										54.73			
9	"	30.26	1.02	.90	.65	—		1.28	13.34	An-1.67	69.17	99.16	
10	"	25.24	1.02	.88	.79	.20		.92	14.88	50.42	63.76	99.54	
11	"	13.30	.69	.91	.83	.48		.20	17.32	65.62	71.25	99.30	
12	Selenite	27.28	1.67	3.81	2.21	.57		2.40	12.80	48.50	82.94	99.35	
12-A	"	15.14	.86	2.62	1.12	.20		.96	16.43	62.22	61.30	99.24—Sample as received	
13	Gypsite	18.00	.98	.96	.53	—		1.35	16.14	61.01	78.65	99.55—Residue from #12 on 10-mesh	
										An-1.22	77.15	99.02	
14	Selenite	20.00	1.63	2.93	1.44	.71		.27	14.55	55.15	69.70	98.68—Sample as received,	
14-A	"	6.66	.57	1.05	.39	—		—	18.32	69.26	87.58	99.33—Residue from #14 on 10-mesh	
15	"	25.60	1.91	4.77	1.80	2.58		1.39	12.50	An-3.08			
15-A	"	8.38	.57	1.19	.72	—		.12	17.97	47.38	59.88	97.93—Sample as received.	
										An-2.43	85.90	99.31—Residue from #15 on 10-mesh	
16	Gypsite	19.48	1.06	1.58	.86	1.08		2.34	15.11	57.24	72.35	98.75	

Mr. McWILLIAMS.—I offer the affidavit of F. M. Eaton, subscribed and sworn to on the 16th day of October, 1915, in which he verifies the affidavits of Mr. Seagrave, and, if your Honor will recall, Mr. Seagrave stated that he turned those samples over to the Eaton laboratories. Mr. Eaton executes this affidavit in which he states the receipt of the samples and made the analysis, and the results being the same I shall not take time to read it. I will ask that it be deemed as read.

(This affidavit is as follows:) [845]

**Defendants' Exhibit "U" (Case No. A-37)—**

**Affidavit of F. M. Eaton.**

State of California,

City and County of San Francisco,—ss.

F. M. Eaton, being first duly sworn, deposes and says:

That he is an officer, to wit, the president of the Eaton Laboratories, a corporation; that on or about the 8th day of October, 1915, affiant received from one M. C. Seagrave certain samples of gypsum with the request that the said samples be analyzed by him; that such analysis was made and the statement attached hereto marked Exhibit "A" and made a part hereof, sets forth the results of such analysis.

F. M. EATON.

Subscribed and sworn to before me this 16th day of October, 1915.

[Seal]

R. B. TREAT,

Notary Public in and for the City and County of San Francisco, State of California. [846]

## EXHIBIT "A."

Lab. No.	Field No.	SO <sub>3</sub>	Water	Gypsum
10125	1 DD	28.75%	14.50%	61.80%
10126	2 DD	37.05%	18.22%	79.60%
10127	3 DD	40.15%	19.23%	86.20%
10128	4 DD	37.40%	18.35%	80.30%
10129	5 DD	35.40%	18.77%	76.10%
10130	6 DD	40.85%	19.11%	87.80%
10131	7 DD	41.12%	19.66%	88.30%
10132	8 DD	36.40%	17.84%	78.25%
10133	9 DD	32.40%	15.64%	69.60%
10134	10 DD	33.55%	16.89%	72.00%
10135	11 DD	37.50%	18.72%	80.60%
10136	12 DD	26.50%	17.12%	57.00%
10137	13 DD	35.20%	18.40%	75.65%
10138	14 DD	32.95%	18.86%	70.80%
10139	15 DD	25.85%	18.05%	55.50%
10140	16 DD	33.75%	18.50%	72.50%

[847]

Mr. McWILLIAMS.—The same with regard to the affidavit of Duncan Anderson, Chief Chemist of Smith, Emery & Company. Mr. Anderson states that he has analyzed the samples submitted by W. H. Ochsner.

(This affidavit is as follows:) [848]

**Defendants' Exhibit "V" (Case No. A-37)—  
Affidavit of Duncan Anderson.**

State of California,  
City and County of San Francisco,—ss.

Duncan Anderson, being first duly sworn, deposes and says:

That he is now, and at all the times herein mentioned was, the chief chemist of Smith, Emery & Company;

That on or about the 7th day of October, 1915, samples of gypsum were given to said Smith, Emery & Company by W. H. Ochsner, with the request that a chemical analysis be made of the said gypsum; that affiant proceeded to make such chemical analysis, and that the results of such analysis so made by him personally are truly and correctly set forth in the statements which are hereto attached and marked Exhibits "A," "B," "C," and "D."

(Signed) DUNCAN ANDERSON.

Subscribed and sworn to before me this 15th day of October, 1915.

[Seal] (Signed) R. B. TREAT,  
Notary Public in and for the City and County of  
San Francisco, State of California. [849]

EXHIBIT "A."

LABORATORY Date, October 13, 1915.

No. 34432.

Sample Gypsite.

Received October 7, 1915. Marked "Station 400'  
SW. 70° from Well #8."

Submitted by Mr. W. H. OCHSNER,

First National Bank Building, San Francisco.

## ANALYSIS.

Silica & Ins.....	10.09%
Alumina     )	
) $\text{Al}_2\text{O}_3$ )— $\text{Fe}_2\text{O}_3$ ) .....	1.20%
Iron Oxide)	
Gypsum ( $\text{CaSO}_4 \cdot 2(\text{H}_2\text{O})$ ) .....	83.33%
Calcium carbonate ( $\text{CaCO}_3$ ) .....	2.37%
Magnesium carbonate ( $\text{MgCO}_3$ ) .....	1.06%
Total.....	98.05%

[850]

## EXHIBIT "B."

LABORATORY

Date, October 13, 1915.

No. 34428

Sample Gypsite.

Received October 7, 1915.    Marked "Station #3,  
Near Well #7, 3' thick  
from wall."

Submitted by Mr. W. H. OCHSNER,  
First National Bank Bldg.,  
San Francisco.

## ANALYSIS.

Silica & Ins. ....	21.58%
Alumina     )	
) $\text{Fe}_2\text{O}_3$ - $\text{Al}_2\text{O}_3$ ) .....	1.24%
Iron Oxide   )	
Gypsum ( $\text{CaSO}_4 \cdot 2(\text{H}_2\text{O})$ ) .....	72.28%
Calcium carbonate ( $\text{CaCO}_3$ ) .....	1.35%
Magnesium Carbonate ( $\text{MgCO}_3$ ) .....	1.65%
Total .....	98.10%

[851]



EXHIBIT "C."

LABORATORY

NO. 34429. Date, October 13, 1915.

Sample Gypsite Marked "Station 4, west of  
#6 well, and south side gulch  
leading to pumping plant."

Received October 7, 1915.

Submitted by Mr. W. H. OCHSNER,  
First National Bank Bldg.,  
San Francisco.

ANALYSIS.

Silica & Ins. ....	3.30%
Alumina )	
) $\text{Al}_2\text{O}_3 - \text{Fe}_2\text{O}_3$ ) .....	0.40%
Iron Oxide )	
Gypsum ( $\text{CaSO}_4 \cdot 2(\text{H}_2\text{O})$ ) .....	91.52%
Calcium carbonate ( $\text{CaCO}_3$ ) .....	2.60%
Magnesium Carbonate ( $\text{MgCO}_3$ ) .....	0.73%
<hr/>	
Total .....	98.55%

[852]

EXHIBIT "D."

LABORATORY

No. 34430. Date, October 13, 1915.

Sample Gypsite  
Received October 13, 1915. Marked "Sample taken  
from Trench H. 70° W.  
#5 S. 45° E. #1. Sec.  
30. Devils Den. A.

Submitted by Mr. W. H. OCHSNER,  
First National Bank Bldg.,  
San Francisco.

## ANALYSIS.

Silica & Ins. ....	4.07%
Alumina      )	
) $\text{Al}_2\text{O}_3 - \text{Fe}_2\text{O}_3$ ) .....	0.20%
Iron Oxide    )	
Gypsum ( $\text{CaSO}_4 \cdot 2(\text{H}_2\text{O})$ ) .....	91.92%
Calcium carbonate ( $\text{CaCO}_3$ ) .....	1.36%
Magnesium carbonate ( $\text{MgCO}_3$ ) .....	1.23%
<hr/>	
Total .....	98.78%

[853]

State of California,

City and County of San Francisco,—ss.

P. W. Tompkins, being first duly sworn, deposes and says: That he is one of the firm of Curtis & Tompkins, copartners doing business as analytical chemists under that firm name;

That on or about the 5th day of October, 1915, certain samples of gypsum were delivered to his said firm by one W. H. Ochsner, with the request that said samples be examined and analyzed for the purpose of determining the chemical constituents and contents of the same; that the said samples of gypsum were analyzed by the said firm of Curtis & Tompkins, and that the following is a correct and accurate statement of the results of such examination and analysis:

## ANALYSIS.

	#26118 NW. cor of	#26119 Trench	#26120	#26121 Station
	NW cor.	200' SW.	#3.	150' SE.
	Subject	55° of		15° of
	Photo.	Well 7.		Well #8.
Sulphur Trioxide (SO <sub>3</sub> ).....	38.18%	27.08%	35.59%	39.70%
“ “ as gypsum				
(CaSO <sub>4</sub> 2H <sub>2</sub> O) .....	82.05%	58.20%	76.50%	85.40%
Water (Loss at 150°C).....	17.63%	14.00%	16.70%	17.33%
Theoretical Loss of $\frac{3}{4}$ ths water content of Gypsum in samples received .....	12.87%	9.14%	12.02%	13.42%
Excess Water .....	4.76%	4.86%	4.68%	3.91%

(Signed) P. W. THOMPkins.

Subscribed and sworn to before me this 15th day  
of October, 1915.

[Seal]

(Signed) R. B. TREAT,

Notary Public in and for the City and County of  
San Francisco, State of California. [854]

Mr. McWILLIAMS.—And now, in conclusion, so far as the Devil's Den is concerned, I read the affidavit of R. A. Morton upon another phase of the case, the relevancy of this affidavit being that it shows that we have applied for a lease on the lands in controversy, and we believe it is material in view of the fact that since there has been a provision made for the leading of this land and of the other lands in that vicinity, that it constitutes a remedy for the Government under circumstances such as exist in the case at bar, and that they are not entitled to institute and maintain an action for damages or for the other relief asked for.

Mr. HALL.—This application has been rejected.

Mr. DUNNE.—No; it is not a fair statement that

the application has been rejected. The Secretary of the Interior declined to act upon it under a sense of comity. The Department of Justice having instituted this litigation, on that ground the Secretary declined to act.

Mr. HALL.—I guess the Court will understand the situation. There has been no contract issued as the result of that application.

The COURT.—A copy of the secretary's letter is in the stipulation of the Lost Hills.

Mr. HALL.—Have you a copy of the letter?

Mr. DUNNE.—It is in the stipulation. I will ask Mr. McWilliams if he will read it.

(The affidavit of R. A. Morton above referred to is as follows:) [855]

**Defendant's Exhibit "B"—Affidavit of R. A. Morton.**

State of California,  
City and County of San Francisco,—ss.

R. A. Morton, being first duly sworn, deposes and says:

I am the duly appointed secretary of the two defendants in the above-entitled action, namely: The Lost Hills Mining Company, a corporation, and the Universal Oil Company, a corporation.

Herewith attached to this affidavit and made a part of the same and marked Exhibit "A," is a duplicate copy of the application of said Lost Hills Mining Company, a corporation, the defendant above named, dated August 3, 1916, for an agreement under the Act of August 25, 1914, covering and embracing the

following described property, to wit:

The southwest quarter (SW $\frac{1}{4}$ ) of section eighteen (18), township twenty-six (26) south, range twenty-one (21) east, Mount Diablo Base and Meridian, Kern County, California; said lands being the lands embraced in the above-entitled action; that attached to said Exhibit "A" and forming a part of said application for leasing contract and agreement, is a copy of the Resolution of the Board of Directors of said Lost Hills Mining Company, a corporation, passed on the 3d day of August, 1916, as certified to by affiant as secretary of said corporation, authorizing the president and secretary to execute the said agreement for and on behalf of the Lost Hills Mining Company; and also attached thereto is a copy of the Resolution passed by the Board of Directors of the Universal Oil Company, a corporation, at a meeting held on the 3d day of August, 1916, consenting and agreeing to the application of the Lost Hills Mining Company, a corporation, for said leasing agreement, which said copy of said resolution was certified to by affiant as secretary of said corporation, as set forth in said [856] Exhibit "A"; and also attached to said Exhibit "A," and forming a part thereof, are copies of all the other necessary and requisite papers and documents, etc., which were attached to said application for leasing agreement, called for under the printed form approved by the Secretary of the Interior on November 21, 1914, with reference to application for leasing agreement under said Act of August 25, 1914 (Public 187), which said printed form was used by said companies,



and by affiant as secretary thereof, in making said application;

Affiant furthermore declares and states under oath, that pursuant to said Resolutions of said companies, and pursuant to said instructions set forth in said Exhibit "A," hereto attached and made a part hereof, the said application was duly filed with the Register and Receiver of the Land Office at Visalia, California, on or about the 14th day of August, 1916, and that thereupon, as affiant is informed and believes and therefore alleges, the said application was forthwith, and on said 14th day of August, 1916, transmitted by special letter to the Commissioner of the General Land Office to be by him forwarded in the regular course of business to the Honorable the Secretary of the Interior. That said application for leasing agreement is still pending.

R. A. MORTON.

Subscribed and sworn to before me, this 21st day of August, 1916.

[Seal]

W. W. HEALEY,  
Notary Public in and for the City and County of  
San Francisco, State of California. [857]

EXHIBIT "A."

Approved by the Department

November 21, 1914. 4—010

APPLICATION FOR AGREEMENT UNDER  
THE ACT OF AUGUST 25, 1914 (PUBLIC  
187).

San Francisco, California, August 3rd, 1916.

The undersigned, Lost Hills Mining Company,  
(Name of applicant.)

hereby applies for an agreement or contract with the Secretary of the Interior for the disposition of oil and gas from the lands hereinafter described, as authorized under the act of Congress, approved August 25, 1914 (Public 187). In support of said application this applicant respectfully represents as follows, which representations the said applicant hereby warrants to be true and correct.

1. That it is the identical ~~person or~~ corporation,  
(He or it.)

who under date of July 10th, 1916, filed in the local land office at Visalia, State of California, mineral application, serial number 06318, for the Lucile Placer Mining Claim ~~placer claim~~, embracing The Southwest quarter (SW $\frac{1}{4}$ ) of Section 18, Township 26 South, Range 21 East M. D. B. & M., in the Visalia land district, State of California.

2. That the applicant desires the contract or agreement herein applied for to embrace the following described lands: The Southwest quarter of Section Eighteen, Township 26 South, Range 21 East, M. D. B. B., being the Lucile Placer Mining Claim.

3. That oil or gas was discovered, or was being produced, upon the lands covered by this application on or before August 25, 1914, and drilling operations were in actual progress on October 3, 1910.

(Strike out whichever is not appropriate.)

4. That, so far as known to applicant, the following enumerated persons or corporations are the only ones claiming any right, title, or interest in and to said lands or any portion thereof, or to the oil or gas produced therefrom, and their respective interests are herein set forth.

Name.

Interest.

Lost Hills Mining Company, holder of legal title and applicant for patent, and Universal Oil Company, operating said property under resolution of the Board of Directors of Lost Hills Mining Company dated January 17th, 1912, certified copy of said resolution hereto attached.

(A fuller statement of interest may be attached if desired.)

5. That the number of wells being operated on the land covered by this application for an agreement or contract is One and the approximate daily gross production of each well at the present time is as follows: Thirty (30) barrels.

6. That contracts for the sale and purchase of the oil and gas products arising from the operations to be carried on under the agreement herein applied for, on the lands covered thereby, have been entered into with the following and no others: None. Duly authenticated copy of each of said contracts is hereto attached and made a part of this application.

7. That the portion of the gross proceeds arising from the sale of the oil and gas which is to be placed in escrow during the life of the contract or agreement herein applied for, will be deposited in the Crocker National Bank of S. F. Bank. There is

(Must be a national bank.)

hereto attached a statement by the Assistant Cashier  
(Officer.)

of said bank which sets forth the rate of interest to be allowed on said escrow deposit and the method by which said interest is to be computed.

8. That there are hereto attached duly executed waivers by each and every one of the parties claiming an interest as specified in paragraph four, releasing the United States from any claim or demand whatsoever arising from the execution of this agreement by the Secretary of the Interior.

LOST HILLS MINING COMPANY. (Corporate Seal)

(Name of applicant.)

By GEO. T. CAMERON, Pres.

By R. A. MORTON, Secy.,

(Address.)

San Francisco, Cal.

The Universal Oil Company consents to and joins in the foregoing application.

UNIVERSAL OIL COMPANY.

(Corporate seal if corporation be the applicant.)

(Corporate Seal)

By R. N. BISHOP, Pres.

By R. A. MORTON, Secy. [858]

George T. Cameron, being first duly sworn, deposes and says he is the President of Lost Hills Mining Company, named in the foregoing application; that he has read the foregoing application and knows the contents thereof and that the facts therein stated are true according to the best of his knowledge, information, and belief.

GEORGE T. CAMERON.

Subscribed and sworn to before me this 11th day of August, 1916.

[Notary Seal]

W. W. HEALEY,  
Notary Public in and for the City and County of San Francisco, State of California.

#### INSTRUCTION.

1. This application can be made and the contract executed only by an applicant for mineral patent for oil or gas lands embraced in an order of withdrawal.

2. The application and the contract must be executed in triplicate and filed in the local land office in the district in which the lands are situated. One set only of the exhibits accompanying the application need be authenticated, but the others must be true copies.

3. In the option of the applicant, the application and contract may cover all the land embraced in the application for patent or one or more legal subdivisions thereof.

4. The form of waiver provided for in section 8 of the application must be absolute and unconditional, and if by a corporation, proper evidence of authority for the execution of such instrument must be attached.



5. Immediately upon filing of the application and contract, properly executed, the Register and Receiver will assign to them the same serial number that the application for patent bears and will forthwith transmit them by special letter to the Commissioner of the General Land Office.

#### AGREEMENT.

Under Act of August 25, 1914 (Public No. 187), for disposition of oil and gas products pending determination of proceedings for patent.

THIS AGREEMENT made and entered into by and between the Secretary of Interior, acting for and in behalf of the United States, party of the first part, and Lost Hills Mining Company, hereinafter called the applicant, party of the second part:

WITNESSETH, That for and in consideration of the attached application and of the mutual covenants and agreements hereinafter provided, and the rights and privileges hereby granted, the parties hereto agree as follows:

1. That this agreement is made on the basis of the statements and representations made by the applicant in the attached application, which statements and representations the applicant warrants to be true and correct; it being further agreed that in case such statements and representations shall be found by the Secretary of the Interior to be untrue or incorrect in any material respect, such finding shall render this agreement subject to cancellation by said Secretary at his option and no notice to the party of the second part.

2. That commencing on the date of this agreement, and continuing for the period pending the determination by the Secretary of the Interior of the title to the land embraced in the attached application, or such other disposition of the same as may be authorized by law, under the rules, regulations, and practice of the land department of the United States, said applicant and all persons claiming by, through or under him, as indicated in the attached application, shall be authorized to work and operate in and upon said lands for the production of oil and gas therefrom, in the manner and on the terms and conditions herein provided and not otherwise.

3. That the applicant shall conduct all drilling, pumping, and other operations for the production, storage, and sale of the oil and gas products from said land in workmanlike manner in accordance with approved practices and methods of operation for the prevention of waste or damage to said lands, or to other lands, for oil and gas producing purposes; and to this end applicant agrees to comply promptly and at his own expense with all reasonable rules, regulations, and requirements of the said Secretary of the Interior, his duly authorized agents and representatives for the prevention of damage and waste as aforesaid.

4. That all of the oil and gas products of a marketable character arising from the operations provided for in the last preceding paragraph shall be sold and disposed of in accordance with the contract or contracts for the sale and purchase of such products submitted with, and as a part of, the attached

application, or such other contract or contracts as may hereafter be entered into with the approval of the Secretary of the Interior.

5. That one-eighth of the gross proceeds, arising from the sale of such oil and gas products, as provided in the preceding paragraph, shall be deposited by the purchaser or purchasers thereof, in the national bank designated in said application, to be held by said bank in escrow, as in this contract provided, such payments to be made monthly on or before the tenth day of each month for all oil and gas sold during the preceding month; the balance (seven-eighths of such gross proceeds) shall be paid to the party or parties entitled thereto; full and detailed statements of accounts of sales and purchases, as aforesaid, shall be made by said purchaser in triplicate, one to accompany the payment to said bank, one to the Chief of Field Division of the General Land Office in whose division said land is situated, and one to the party of the second part.

6. That said portion of the gross proceeds, to be deposited in said bank in escrow, as provided in the last preceding paragraph shall be subject to change by the Secretary of the Interior at any time on 30 days notice: *Provided*, That in case such portion shall be increased, it shall be optional with the second party to continue under this agreement; *Provided further*, That notice to discontinue operations hereunder shall be filed in the proper United States Land Office within 10 days after the receipt of notice of such increased amount to be deposited in escrow.

7. That all interest accruing on the portion of

such gross proceeds, deposited in said bank in escrow as aforesaid, shall be added to the principal at regular intervals in accordance with the previous understanding with said bank as indicated in the attached application; that in case the land department of the United States shall finally determine that under the law, rules, and regulations controlling the granting of patents to mineral lands, said second party is entitled to a patent to the land and premises described and applied for in said mineral application, and embraced by this contract, then and in that case, on the issuance of said patent the Secretary of the Interior shall so certify to said bank, whereupon said bank shall be authorized and deemed instructed by the parties hereto, to pay over all moneys deposited therein under the terms hereof, with accumulated interest, to the second party; but in case the land department of the United States shall finally determine, in accordance with the law, its rules, regulations, and practice, that the second party is not entitled to patent for the lands and premises embraced in this agreement, and same shall be finally rejected, *then* on receipt of the certificate of the Secretary of the Interior to that effect, said bank shall be authorized, and it shall be deemed to be instructed by the parties hereto, to pay over all of said payments and accrued interest to the Treasurer of the United States, whereupon all and every claim, right, title, or interest in said funds and accumulated interest, either on the part of the second party or any person claiming by, through or under him, shall cease and terminate; in either of the cases above described, op-



erations under this contract shall cease and terminate on the issuance of the certificate of the Secretary of the Interior as aforesaid; but in case this contract shall, under any of the provisions hereof, be canceled prior to the final determination of the matter of said application for patent, any moneys theretofore deposited in escrow shall nevertheless remain so deposited until said application for patent shall be finally approved or rejected.

8. That in case a portion of the land embraced in this agreement shall be finally patented to applicant, and patent shall be denied for the remainder thereof, then such escrow deposits and accumulated interest hereinabove provided for shall be paid to the applicant and to the Treasurer of the United States in such proportion as the area patented shall bear to the area for which patent shall be denied, as shown to said bank by the certificate of the Secretary of the Interior.

9. That the said purchaser of the oil and gas products and the said bank shall be furnished with copies hereof by the party of the first part, and same shall be deemed and constitute joint instructions to them respectively in so far as applicable.

10. That all the workings, operations, premises, equipment, books, and records of the second party, or any person claiming by, through, or under him, pertaining to, or included in, the subject matter of this agreement, shall, at all times, be subject to inspection by the authorized representatives of the Department of the Interior, and such books, records, and accounts shall be kept and such reports made as the first party



by the Secretary of the Interior or his authorized representatives shall, from time to time, direct.

11. Such deposits in escrow, when paid over to the Treasurer of the United States as herein provided, shall be and constitute full and complete payment, accord, and satisfaction of all claims of the United States for trespass for any and all oil and gas removed from said premises during the period of, and under and subject to, this agreement, as against the applicant, producer or purchaser of such oil or gas products, who shall have in good faith and without collusion done and performed each and every act herein required to be performed by him or it, strictly in accordance with this agreement, even though said application for patent shall be denied.

12. That this contract shall be binding on the heirs, assigns, and legal representatives of the second party hereto.

13. That in no case and under no circumstances or conditions shall the United States become liable to any person whatsoever under or by reason of this contract, or any of its provisions.

14. That failure or default on the part of the second party to comply strictly with the terms hereof shall render this contract subject to cancellation by the Secretary of the Interior at his option immediately on notice of such cancellation to the second party, and the decision of the said Secretary shall be final on the question of the existence of such failure or default.

15. That no Member of or Delegate to Congress,

or Resident Commissioner, or officer or employee of the Department of the Interior, is or shall be admitted to any share or part in this agreement, or derive any benefit which may arise therefrom, and the provisions of section 3741 of the Revised Statutes of the United States, and sections 114, 115, and 116 of the Codification of the Penal Laws of the United States, approved March 4, 1909 (35 Stat., 1109), relating to contracts, enter into and form a part of this agreement, so far as the same may be applicable.

IN WITNESS WHEREOF, the said parties hereto have caused the execution of these presents by themselves or by their duly authorized officers, agents, or representatives, as of the — day of August, 1916.

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Secretary of the Interior.

LOST HILLS MINING COMPANY,

By GEO. T. CAMERON,

President.

[Corporate Seal] By R. A. MORTON,

Secretary.

The Universal Oil Company consents to and joins in the foregoing application.

UNIVERSAL OIL COMPANY.

By R. N. BISHOP,

President,

[Corporation Seal] By R. A. MORTON,

Secretary.

## ACKNOWLEDGMENT OF CORPORATION.

State of California,

City and County of San Francisco,—ss.

On this 11th day of August, A. D. 1916, before me, a Notary Public within and for the City and County of San Francisco, California, aforesaid, personally appeared George T. Cameron and R. A. Morton to me personally known, who being by me duly sworn, did each say that George T. Cameron is the president and R. A. Morton is the secretary of the Lost Hills Mining Company, a corporation, and that the seal affixed to the foregoing and annexed instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors; and said George T. Cameron and R. A. Morton duly acknowledged that they each had in their said official capacities executed the foregoing instrument as the act and deed of the said company for the consideration and purposes therein mentioned and set forth.

Witness my hand and official seal this 11th day of August, 1916.

[Notary Seal]

W. W. HEALEY,

Notary Public in and for the City and County of  
San Francisco, State of California.

(My commission expires Aug. 28, 1917.)

## ACKNOWLEDGMENT OF CORPORATION.

State of California,

City and County of San Francisco,—ss.

On this 11th day of August, A. D. 1916, before me, a Notary Public, within and for the City and County

and State aforesaid, personally appeared R. N. Bishop and R. A. Morton to me personally known, who being by me duly sworn, did each say that R. N. Bishop is the President and R. A. Morton is the Secretary of Universal Oil Company, a corporation, and that the seal affixed to the foregoing and annexed instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors; and said R. N. Bishop and R. A. Morton duly acknowledged that they each had in their said official capacities executed the foregoing instrument as the act and deed of the said company for the consideration and purposes therein mentioned and set forth.

Witness my hand and official seal this 11th day of August, 1916.

[Seal]

W. W. HEALEY,

Notary Public in and for the said City and County of San Francisco, State of California.

(My commission expires August 28, 1917.)

KNOW ALL MEN BY THESE PRESENTS:  
That the Lost Hills Mining Company, a corporation duly organized and existing under the laws of the State of California, and Universal Oil Company, a like corporation, hereby release the United States of and from any claim or demand whatsoever arising from the execution by the Secretary of the Interior of the Agreement (to which this waiver is attached) with The Lost Hills Mining Company for the disposition of oil and gas produced on and from the southwest quarter (SW.  $\frac{1}{4}$ ) of Section eighteen

(18), township twenty-six (26) south, range twenty-one (21) east, Mount Diablo Base and Meridian, Kern County, California.

In witness whereof, the said Lost Hills Mining Company and the said Universal Oil Company have caused their corporate names and seals to be hereunto affixed by their duly authorized officers pursuant to a resolution duly adopted by the Board of Directors of said Corporation.

Dated this 3d day of August, 1916.

LOST HILLS MINING COMPANY,

By GEO. T. CAMERON,

President.

[Corporate Seal] By R. A. MORTON,

Secretary.

UNIVERSAL OIL COMPANY,

By R. N. BISHOP,

President,

[Corporate Seal] By R. A. MORTON,

Secretary. [859]

On motion of Director Gregg, seconded by Director Berry, it was

“RESOLVED, That the President and Secretary of

LOST HILLS MINING COMPANY

be and they are hereby authorized and directed to execute in the name of this corporation and under its corporate seal and as its corporate act and deed application for agreement under the Act of August 25th, 1914 (Public 187), together with the Agreement thereto attached for the disposition of oil and gas products pending the determination of applica-



tion for patent, and also a waiver releasing the United States from any claim or demand whatsoever, arising from the execution of said agreement for the disposition of oil and gas, a copy of which said application, Agreement and Waiver are hereto attached and hereby made a part of this resolution.”

I, R. A. Morton, as Secretary of LOST HILLS MINING COMPANY, a corporation, duly organized and existing under the laws of the State of California, hereby certify that the foregoing is a full, true and correct copy of a resolution of said corporation, at which meeting a quorum of said Board was present and acting, and which meeting was regularly called and held on the 3d day of August, 1916, at the office of the said corporation in the City of San Francisco, County of San Francisco, State of California.

IN WITNESS WHEREOF, on the 3d day of August, 1916, I have hereunto set my hand and affixed the seal of said corporation.

[Corporate Seal]

R. A. MORTON,  
Secretary. [860]

“RESOLVED, That this Company, Universal Oil Company, does hereby consent and agree to the application of the Lost Hills Mining Company for leasing agreement under the Act of August 25th, 1914, and

FURTHERMORE, in consideration of the benefits obtained and to be obtained, this Company further ratifies and approves the terms of said leasing agreement and all thereof as the same shall be executed and entered into by and between the Lost Hills

Mining Company and the Interior Department of the United States under said Act of Congress, and

BE IT FURTHER RESOLVED, That this Company shall and does hereby waive and release the United States from any claim or demand whatsoever arising from the execution of said agreements for the disposition *oil* oil and gas, a copy of said application, agreement and waiver are hereto attached and hereby made a part of this resolution."

I, R. A. Morton, as Secretary of Universal Oil Company, a corporation duly organized and existing under the laws of the State of California, hereby certify that the foregoing is a full, true and correct copy of a resolution of said corporation, at which meeting a quorum of said Board was present and acting, and which meeting was regularly called and held on the 3d day of August, 1916, at the office of the said corporation in the City of San Francisco, County of San Francisco, State of California.

IN WITNESS WHEREOF, on the 3d day of August, 1916, I have hereunto set my hand and affixed the seal of said Corporation.

[Corporate Seal]

R. A. MORTON,

Secretary. [861]

THE CROCKER NATIONAL BANK,  
San Francisco.

August 3d, 1916.

Hon. Secretary of the Interior,  
Lost Hills Mining Company,  
Universal Oil Company,  
San Francisco, California.

Gentlemen:

The Crocker National Bank of San Francisco will allow interest at the rate of two per cent. per annum on average daily balance computed and added monthly on all sums deposited in escrow under the attached agreement.

THE CROCKER NATIONAL BANK OF  
SAN FRANCISCO,

By J. B. McCARGAR,  
Assistant Cashier. [862]

Copy of Resolution of the Board of Directors of the Lost Hills Mining Company passed at a meeting of the Board of Directors held on the 3d day of August, 1916, at the office of the Company, Crocker Building, San Francisco, California, duly convened and held.

“WHEREAS, this Company, Lost Hills Mining Company, a corporation, organized and existing under and by virtue of the laws of the State of California, is making application for a leasing agreement under the Act of August 25th, 1914, with the Interior Department of the United States covering the following described property: SW.  $\frac{1}{4}$  Sec. 18, Tp. 26 S., R. 21 E., M. D. B. M., Kern Co., Cal.

WHEREAS, it is necessary to have this Company

represented by an Attorney-in-Fact when said application is presented to the Interior Department and to the other Departments of the United States Government;

NOW, THEREFORE, upon motion duly moved, seconded and unanimously carried, be it

RESOLVED, That Joseph D. Redding, Attorney, Counsel for and Director in this Company, be and he hereby, and by these presents, is constituted and appointed the true and lawful Attorney for this Company and in the name, place and stead of this Company, Lost Hills Mining Company, to represent this Company and to act on its behalf in presenting said application before the Interior Department and all other departments of the Government of the United States, with full power and authority hereby given and vested in said Joseph D. Redding to sign and execute said agreement and application and all corrections and amendments thereto, which may be made by the said Interior Department and which shall meet the approval of said Attorney-in-Fact of this Company.

GIVING AND GRANTING UNTO the said Attorney of this Company, lost Hills Mining Company, full power and authority to do and to perform all and every act and thing whatsoever requisite and necessary to be done in and about the premises as fully to all intents and purposes as this Company and its Board of Directors might or could do if it and they were personally present or were executing said application by the signatures of the President and Secretary and under the seal of said Company,

hereby ratifying and confirming all that the said Attorney-in-Fact shall lawfully do or cause to be done by virtue of these presents.”

I, R. A. MORTON, Secretary of LOST HILLS MINING COMPANY, a corporation created, organized, and existing under the laws of the State of California, hereby CERTIFY that the foregoing is a full, true and correct copy of a resolution duly passed and adopted at a meeting of the Board of Directors of said corporation, duly convened and held at the office of the Company in the City and County of San Francisco, State of California, on the 3d day of August, 1916. [863]

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said corporation this 3d day of August, 1916.

[Corporate Seal] R. A. MORTON,

Secretary Lost Hills Mining Company. [864]

Copy of Resolution of the Board of Directors of the Universal Oil Company passed at a meeting of the Board of Directors held on the 3d day of August, 1916, at the office of the Company, Crocker Building, San Francisco, California, duly convened and held.

“WHEREAS, this Company, namely, Universal Oil Company, a corporation organized and existing under and by virtue of the laws of the State of California, has consented to and has joined in the application of the Lost Hills Mining Company, a similar corporation, for leasing agreements under the Act of August 25<sup>th</sup>, 1914, with the Interior Department of the United States covering the following described property: SW.  $\frac{1}{4}$  Sec. 18, Tp. 26 S., R. 21 E.,



M. D. B. M., Kern Co., Cal.

WHEREAS, it is necessary to have this Company represented by an Attorney-in-Fact when said application is presented to the Interior Department and to the other Departments of the United States Government;

NOW, THEREFORE, upon motion duly moved, seconded and unanimously carried, be it

RESOLVED, That Joseph D. Redding, Attorney, Counsel for and Director in this Company, be and he hereby, and by these presents, is constituted and appointed the true and lawful Attorney for this Company and in the name, place and stead of this Company, Universal Oil Company, to represent this Company and to act on its behalf in presenting said application before the Interior Department and all other Departments of the Government of the United States, with full power and authority hereby given and vested in said Joseph D. Redding to sign and execute said agreement and application and all corrections and amendments thereto, which may be made by the said Interior Department and which shall meet the approval of said Attorney-in-Fact of this Company.

GIVING AND GRANTING UNTO the said Attorney of this Company, Universal Oil Company, full power and authority to do and to perform all and every act and thing whatsoever requisite and necessary to be done in and about the premises as fully to all intents and purposes as this Company and its Board of Directors might or could do if it and they were personally present or were executing

said application by the signatures of the President and Secretary and under the seal of said Company, hereby ratifying and confirming all that the said Attorney-in-Fact shall lawfully do or cause to be done by virtue of these presents."

I, R. A. MORTON, Secretary of UNIVERSAL OIL COMPANY, a corporation, created, organized and existing under the laws of the State of California, hereby CERTIFY that the foregoing is a full, true and correct copy of a resolution duly passed and adopted at a meeting of the Board of Directors of said corporation, duly convened and held at the office of the Company in the City and County of San Francisco, State of California, on the 3d day of August, 1916. [865]

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said corporation this 3d day of August, 1916.

[Corporate Seal] R. A. MORTON,  
Secretary Universal Oil Company. [866]

Mr. McWILLIAMS.—I will offer the affidavit of Edmund Tauszky, executed on July 28, before Treat, Notary Public.

(This affidavit reads as follows:) [867]

**Defendants' Exhibit "X" (Case No. A-37)—  
Affidavit of Edmund Tauszky.**

United States of America,  
Northern Dist. of California,  
City and County of San Francisco,—ss.

Edmund Tauszky, being first duly sworn, deposes and says:

That he is and has been since the 15th day of

September, 1911, attorney for Associated Oil Company, one of the defendants in the above-entitled suit; that prior to execution of the agreement dated the 16th day of January, 1912, between Universal Oil Company and said Associated Oil Company referred to in the answer of said Associated Oil Company to the Bill of Complaint herein, said Universal Oil Company through its representatives submitted to affiant abstracts of title to the lands referred to in said agreement, including abstract of title to the NE.  $\frac{1}{4}$  of Section 30, T. 26 S., R. 21 E., M. D. B. & M., and also copy of application of the defendant Devil's Den Consolidated Oil Company for patent to said NE.  $\frac{1}{4}$  of said Section 30; that said representatives also stated to affiant that said lands had been located in good faith under the Placer Mining Laws of the United States long prior to the 27th day of September, 1909, and that said Devil's Den Consolidated Oil Company had in all particulars complied with the laws of the United States so as to entitle it to patent for said NE.  $\frac{1}{4}$  of said Section 30; that affiant examined said abstracts of title and said applications for patent, and as a result of such examination and in reliance upon the statements made to him by the said representatives, which statements affiant believed to be true, affiant was of opinion that defendant Devil's Den Consolidated Oil Company was entitled to patent for said NE.  $\frac{1}{4}$  of said Section 30, provided that the facts as stated to affiant were established to the satisfaction of the Land Department of the United States; that affiant reported said matters to the officers of said de-

fendant Associated Oil Company before said agreement was entered into, and upon the warranty of said Universal [868] Oil Company that it and those under whom it was in possession of said lands were the owners thereof and were entitled to patents therefor, said defendant Associated Oil Company entered into said agreement.

(Signed) EDMUND TAUSZKY.

Subscribed and sworn to before me this 28th day of July, 1916.

[Seal] (Signed) R. B. TREAT,  
Notary Public in and for the City and County of  
San Francisco, State of California. [869]

Mr. McWILLIAMS.—Finally, so far as our other affidavits, except the affidavit of Mr. Morton, I offer in evidence the affidavit of Rudolph Schwartzlose, subscribed and sworn to on the 15th day of October, 1916, before Grace R. Schmitt, in this City and County.

(This affidavit is as follows:) [870]

**Defendants' Exhibit "Y-1" (Case No. A-37)—  
Affidavit of Rudolph Schwarzlose.**

State of California,  
City and County of San Francisco,—ss.

Rudolph Schwarzlose, being first duly sworn, deposes and says:

That he is a keramical chemist, residing in Alameda, California.

That on or about the 7th day of October, 1915, certain specimens of gypsum were delivered to affiant by one W. H. Ochsner with the request that

the said gypsum be calcined and manufactured into plaster of paris; that affiant in accordance with the instructions given him, as aforesaid, proceeded to calcine the said samples of gypsum, and that the attached specimen marked Exhibit "A"\* is the product of the said samples of gypsum made into plaster of paris.

RUDOLPH SCHWARZLOSE.

Subscribed and sworn to before me this 15th day of October, 1915.

[Seal]                      GRACE R. SCHMITT,  
Notary Public in and for the City and County of  
San Francisco, State of California.

\*See Rec. p. 1463. [871]

**Defendants' Exhibit "Y-3," (Case No. A-37)—  
Affidavit of Rudolph Schwarzlose.**

State of California,

City and County of San Francisco,—ss.

Rudolph Schwarzlose, being first duly sworn, deposes and says:

That he is a keramical chemist, residing in Alameda, California.

That on or about the 7th day of October, 1915, certain specimens of gypsum were delivered to affiant by one W. H. Ochsner with the request that the said gypsum be calcined and manufactured into plaster of paris; that affiant in accordance with the instructions given him, as aforesaid, proceeded to calcine the said samples of gypsum, and that the attached specimen marked Exhibit "B"\* is the



product of the said samples of gypsum made into plaster of paris.

RUDOLPH SCHWARZLOSE.

Subscribed and sworn to before me this 15th day of October, 1915.

[Seal] GRACE R. SCHMITT,  
Notary Public in and for the City and County of  
San Francisco, State of California. [872]

**Defendants' Exhibit "Y-4," (Case No. A-37)—  
Affidavit of Rudolph Schwarzlose.**

State of California,  
City and County of San Francisco,—ss.

Rudolph Schwarzlose, being first duly sworn, deposes and says:

That he is a keramical chemist, residing in Alameda, California.

That on or about the 7th day of October, 1915, certain specimens of gypsum were delivered to affiant by one W. H. Ochsner with the request that the said gypsum be calcined and manufactured into plaster of paris; that affiant in accordance with the instructions given him, as aforesaid, proceeded to calcine the said samples of gypsum, and that the attached specimen marked Exhibit "C"\* is the product of the said samples of gypsum made into plaster of paris.

RUDOLPH SCHWARZLOSE.

Subscribed and sworn to before me this 15th day  
of October, 1915.

[Seal] GRACE R. SCHMITT,  
Notary Public in and for the City and County of  
San Francisco, State of California. [873]

**Defendants' Exhibit "Y-5," (Case No. A-37)—  
Affidavit of Rudolph Schwarzlose.**

State of California,  
City and County of San Francisco,—ss.

Rudolph Schwarzlose, being first duly sworn, deposes and says:

That he is a keramical chemist, residing in Alameda, California.

That on or about the 7th day of October, 1915, certain specimens of gypsum were delivered to affiant by one W. H. Ochsner with the request that the said gypsum be calcined and manufactured into plaster of paris; that affiant in accordance with the instructions given him, as aforesaid, proceeded to calcine the said samples of gypsum, and that the attached specimen marked Exhibit "D"\* is the product of the said samples of gypsum made into plaster of paris.

RUDOLPH SCHWARZLOSE.

Subscribed and sworn to before me this 15th day  
of October, 1915.

[Seal] GRACE R. SCHMITT,  
Notary Public in and for the City and County of  
San Francisco, State of California. [874]

**Defendants' Exhibit "Y-E," (Case No. A-37)—  
Affidavit of Rudolph Schwarzlose.**

State of California,  
City and County of San Francisco,—ss.

Rudolph Schwarzlose, being first duly sworn, deposes and says:

That he is a keramical chemist, residing in Alameda, California.

That on or about the 7th day of October, 1915, certain specimens of gypsum were delivered to affiant by one W. H. Ochsner with the request that the said gypsum be calcined and manufactured into plaster of paris; that affiant in accordance with the instructions given him, as aforesaid, proceeded to calcine the said samples of gypsum, and that the attached specimen marked Exhibit "E"\* is the product of the said samples of gypsum made into plaster of paris.

**RUDOLPH SCHWARZLOSE.**

Subscribed and sworn to before me this 15th day of October, 1915.

[Seal] GRACE R. SCHMITT,  
Notary Public in and for the City and County of  
San Francisco, State of California. [875]

**Defendants' Exhibit "F" (Case No. A-37), Affidavit  
of Rudolph Schwarzlose.**

State of California,  
City and County of San Francisco,—ss.

Rudolph Schwarzlose, being first duly sworn deposes and says:

That he is a keramical chemist, residing at Alameda, California;

That on or about the 7th day of October, 1915, certain specimens of gypsum were delivered to affiant by one W. H. Ochsner with the request that the said gypsum be calcined and manufactured into plaster of paris; that affiant in accordance with the instructions given him, as aforesaid, proceeded to calcine the said samples of gypsum, and that the attached specimen marked Exhibit "F" \*is the product of the said samples of gypsum made into plaster of paris.

RUDOLPH SCHWARZLOSE.

Subscribed and sworn to before me this 15th day of October, 1915.

[Seal]

GRACE R. SCHMITT,

Notary Public in and for the City and County of San Francisco, State of California. [876]

Mr. McWILLIAMS.—The other affidavits also have attached to them samples of the result of the analysis made by Mr. Schwartzlose, which contain the description as to where he got the material out of which these samples were made.

Thereupon an adjournment was taken until August 25, 1916, at 10 o'clock A. M. [877]  
San Francisco, California, August; 10 o'clock A. M.

### **Testimony of H. H. Ochsner, for Defendants.**

H. H. OCHSNER, produced as a witness on behalf of defendants, having been duly sworn, testified as follows:

(Testimony of H. H. Ochsner.)

Direct Examination.

(By Mr. McWILLIAMS.)

I am a consulting geologist. My office is in the First National Bank Building, San Francisco. I have been engaged in that business for ten years. My preliminary training has been at Stanford University and University of Wisconsin.

Q. Are you a graduate of either of those?

A. The last two degrees I took in Stanford.

I have been engaged in research work at Stanford. The nature of my business as a consulting geologist during the last five years has been devoted to the work as to petroleum and industrial minerals. To explain more fully, the work in the industrial materials, minerals, and petroleum, consists, first, in an examination of the territory the determination of its possibilities, and then ultimately, if necessary, and deemed expedient, the development and operation of the property.

My original work was with the Southern Pacific railroad, in the capacity of Field Geologist. Later on, I was connected with the Associated Oil Company and some other corporations. The last five years it was independent of any corporation, doing private work for investors and operating companies for industrial materials.

I have had experience in gypsum at King City, Monterey County, and near Fillmore, in Ventura County. The nature of my work in Monterey County was the examination of the material as to its geological and chemical character for the purpose of



(Testimony of H. H. Ochsner.)

using it [878] for industrial purposes. The nature of my work there was the examination of the deposit and to investigate whether it would prove a success—the economic success yielding a profit.

Q. What was the extent of the gypsum to be found in that tract?

A. It was a gypsite appearing at the surface with a small overburden of soil, gypsite averaging perhaps two feet thick, but over a rather limited area. The deposit after its deposition as a gypsite deposit had apparently shared in some disturbance which had disrupted it and exposed it to the weather and eroding agents, which somewhat worked against its possibilities.

The WITNESS.—(Continuing.) It was afterwards developed by local capital and considerable tonnage of the material taken away and marketed. I advised that it could be marketed in that connection.

The other property that I mentioned was at Fillmore, Ventura County, and consisted of a small deposit of very ridgy material in the topographic feature known as Oake Ridge, the top of which ridge formed the south border of the Santa Clara Valley. The deposit was of limited extent but very pure, white and partly crystalline. I opposed the working of that supply because of its limited extent.

With respect to the property last referred to, an extensive plant was erected at Fillmore to operate the gypsum deposit with the idea of marketing the finished articles, such as a covering for steam pipes,

(Testimony of H. H. Ochsner.)

architectural boards and lath, to satisfy some of the newer uses of gypsum as applied in the arts and building trades. By "newer uses" I refer to the use of gypsum, which has been continually increasing. There has been a larger and wider scope and increased application of gypsum in the industrial arts and sciences, and an increased demand for it, and this plant was [879] calculated to furnish some of these newer materials. It is used as a non-conductor in refrigerating and heating plants; it is used as tiling and boards and has a new application in what is known as the gypsum slabs for different purposes, electrical and otherwise. The largest use is its new application on the farm. That is in larger use, as a fertilizer, and for the preservation of certain valuable elements in natural manures. Its use as a fertilizer is increasing very largely.

I was on the northwest quarter of Section 30, 26-21, being the property of the Devil's Den Consolidated Oil Company, in September, 1915, last year. I was in company with Hugo Fischel, Roy Bishop, the manager of the producing properties, and the superintendent of the property and superintendent of the employees of the company.

We expended two days in making an examination of that quarter section and the land in that vicinity outside of the quarter section. The examination had for its object the taking of a series of samples which would be characteristic of the gypsum occurring in that locality and in that particular area. There was a series of openings, cuts, trenches, small pits, which

(Testimony of H. H. Ochsner.)

had been dug over the entire area and its neighborhood, to expose the gypsum and gypsum-bearing earth. We investigated all of those and dug two holes, the idea being to choose samples from the entire exposures, which would be as nearly as possible a fair sampling of the entire deposit and entire occurrence of gypsum-bearing material at that place. Samples were not taken from trenches already made, but from the old excavations and pits, and the new ones.

Where the samples were taken from the excavations or trenches, to explain a little more definitely the manner in which they were taken, take for illustration the side of a trench, it [880] is a large trench. I don't know how many feet long, but it exposes the gypsite very clearly. We dug back from the edge of the trench—from its face—twelve or fourteen inches, and then vertically from the top to the bottom of the exposure of the gypsite, choosing samples from this niche or cut in the face and thickness of the mineral occurrence.

No samples were taken by me from what was termed rich surface clods or lumps of gypsum. The samples were so taken that when they were taken they would consist of samples from top to bottom. The "surface veneer" or the face of the wall of the trench, is the whitening and bleaching of the mass of mineral. It is probably due to the weather, the atmosphere and the sun, and it appears to be perhaps the thickness of paper on the face of the deposit itself. Apparently it does not exceed in thickness ap-

(Testimony of H. H. Ochsner.)

proximately the thickness of paper at any place in the trenches.

Q. Is that so-called surface veneer such as would affect the analyses of the samples taken from the walls of the trench?

A. It would be negligible.

The WITNESS.—(Continuing.) That veneer would have to consist of possibly an inch or an inch and a half in thickness back from the face of the trench into its walls in any way to affect the samples as drawn from the mineral itself; to affect the chemical analysis of the size of the samples taken by me.

The samples that were taken from the walls of the trenches and from other excavations upon the surface, were taken either by hand or by shovel, whichever was convenient, and without alteration or choice, sorting, or cleaning in any way, and were placed in small canvass bags with labels to indicate the location from which they were taken. The bags were then all gathered together for the general area and placed in larger bags and lots and sent to San Francisco. Here they were divided into equal proportions and [881] distributed to two firms of chemists.

By Mr. DUNNE.—I now call your attention to the first analysis, Exhibit "A," attached to your affidavit, where I find that sample 26118 is rated at 82.05 gypsum. Sample 26119 as 58.20 per cent gypsum; sample 26,120 at 76.50 per cent gypsum, and sample 26,121 at 85.40 per cent gypsum. Now, will you explain the disparity in those figures, two of the samples running 82 and 85, in round figures, one 76 per



(Testimony of H. H. Ochsner.)

cent and one 58 per cent, and whether that disparity has reflection and explanation in the character of the layers wherein the gypsite was deposited?

A. The samples were so taken as to show the relative chemical character of the gypsite at the surface and the underlying gypsum-bearing dirt or formation. The samples chosen from the overlying material have a higher rate in analysis.

Q. Take, for example, the 82 per cent and 85 per cent. Would those percentages and samples be referable to the overlying gypsite as distinguished from the gypsiferous earth underneath?

A. They are distinguished from that. The samples were so chosen together with corresponding numbers on these analyses so that the analysis may be taken as a characteristic of that upper or gypsite-bearing zone.

Now, take the 58.20 per cent. That percentage or sample would apply to the lower zone, that indefinite thickness of gypsum-bearing earth or formation underlying the gypsite at the surface.

The entire area of the Northeast quarter is overlaid by a thickness of a foot and a half to three and a half feet, estimated at possibly four hundred thousand tons. The entire tonnage estimate is assigned or assignable to the upper or definite gypsum zone having the analysis of 80 to 85 per cent.

(Direct Examination resumed by Mr. Williams.)  
[882]

In my opinion, the occurrence of gypsum in that vicinity, its history, and origin, is rather simple.



(Testimony of H. H. Ochsner.)

The Lost Hills originated as a small anticline in the old inland sea of the San Joaquin Valley at the time when the inland waters were brackish and the muds of the area were filled with the gypsum-bearing waters. The bowing up of the beds or the anticline in this zone brought about an exposure. It brought about an elevation of the lake bottom or ocean bottom, bringing it in contact with the air, and brought about evaporation of the underground water at this place. The natural tendency of water underground is to fill vacancies, and there was a concentration of the gypsum-bearing waters in this dome or anticline as it is exhibited today by the topography of the Lost Hills. The waters rising to the surface to fill the vacancy or the dryness caused by the exposure to the sun, carried with it a burden of gypsum, and as it came to the surface it deposited it in a concentrated layer at the surface. Part of the material which did not reach the surface was gypsite in the lower layers of the formation, scattering through a number of feet vertically.

Approximately, in geological terms, the formation of that stratum or those strata of gypsum has been going on there since the last disturbance of California history, a matter of tertiary time, perhaps fifteen thousand years or ten thousand. It covered a good many thousands of years.

Q. To what extent does capillary attraction explain the existence of gypsite above the gypsiferous earth?

A. That is a peculiar law of fluids, under which

(Testimony of H. H. Ochsner.)

they follow the lines of capillarity or the little interstice in the soil or formations, and the little particles which compose these and flow from the saturated formation or ground to the formation which is dry. [883] It follows in this movement that there is a lateral movement in the hills and a vertical one, and it followed into this islet or dome.

The capillary attraction was a material factor in bringing about this upper stratum of solid gypsite. The principal factor, in my opinion, that caused the upper stratum of gypsum to be laid down, was the more broad application of a rather profound condition there, a condition which has its origin in a movement as great as the disturbance which made the Lost Hills themselves.

Gypsum occurs over the dome of the entire present topography of the Lost Hills. It is not confined to any particular bumps or slight elevations, but is confined to that broad topography—that broad geological structure—which comprises the Lost Hills themselves. That whole Lost Hills section constitutes the dome to which I refer.

Q. State whether or not it is correct to say that the reason that gypsite occurs on the elevations is that elevations are favorable to the occurrence of gypsite.

A. That elevations are favorable to the occurrence of gypsite is evidenced in this case, but when it is taken to the narrower applications of the Lost Hills and to the so-called bumps or local elevations which are produced by comparatively recent erosions which

(Testimony of H. H. Ochsner.)

have cut into the much older and much more prominent and fundamental gypsum deposits and brought about an appearance of lenses—not lenses, but broken portions of a large and general mineral deposit.

When the gulches were to any depth—several feet—the overlying gypsum has been carried away by recent erosions and only the gypsum-bearing earth was present. It would be correct to say [884] that gypsum or gypsite occurred over that whole section except where erosion has carried it away. The existence of gypsum in that vicinity is the rule and not the exception.

It is not true that the gypsum is to be found in that land constituting the Lost Hills merely in what have been termed lenses. It would not be possible for gypsum to be formed or to have been laid down merely in lenses under conditions like the Lost Hills where the area and distribution of gypsum is so great.

I recognize certain photographs that appear in the affidavit of Mr. Fischel, being Defendants' Exhibit "L," and took them. To the best of my knowledge they were taken on the Northeast quarter of Section 30 in controversy. The quarter was identified by the local men, by the managers of the two oil properties, who were there. The photographs were taken of the gypsum shown upon that quarter section.

Photograph number 2 is taken of a trench which I don't know the exact length of. It is perhaps 200 feet long, or perhaps more. I believe that particular photograph was taken on the southeast corner of the

(Testimony of H. H. Ochsner.)

Northeast quarter of the quarter section described. By way of explaining the appearance of that trench, the location was so chosen that it would show the relation between the gypsite occurring as a definite mineral zone marked A, and its relation with the soil or overburden, marked A. The photo is the best evidence of the sharp line of definition between the gypsite itself as a mineral and the overlying soil. The bottom of the cut is filled in gypsite.

Photograph number 3, in Mr. Fischel's affidavit, is taken in the same cut on the west border, as I recall it, looking toward the west, and Mr. Fischel in the foreground with his hammer on the upper edge of the deposit, layer or stratum. Below him the gypsite [885] continues and the bottom stratum has not been reached at this place.

Photograph number 4 represents the same depth, with Mr. Fischel standing holding the hammer on the line between the upper edge of the deposit and the lower edge of the overburden of soil and dirt. It is chosen to show the relation between the gypsite as a bed and its overburden.

Number 6 represents the same trench with the same lines of definition between the gypsite and the overburden.

Q. I notice that the white stratum does not appear so clearly on photograph number 6 as on photograph number 4. Will you state whether or not that indicates that gypsum does not exist in the trenches shown on photograph number 6?

A. I don't remember the exact physical appearance



(Testimony of H. H. Ochsner.)

of that now, but there is a small dripping down of dirt on top, which probably has obscured the gypsum and dirtied it, and it does not stand out quite in contrast with the overburden as in the other photos. I can see the depth of the well-defined gypsum layer.

Explaining photograph number 9, it was taken in what seemed to be a cellar about ten feet square and twelve or fourteen feet deep. It was chosen to show the relation between the gypsite zone on top and the gypsum-bearing formation underneath. In this case the gypsum-bearing formation was almost entirely filled with the white, clear, beautiful crystals of selenite. It was crystalline. The whole depth of ten or twelve feet was gypsum-bearing.

The lower half of that trench as it appears from the photograph I would term as gypsiferous earth, which appears upon the wall of the trench itself as darker and brownish, in contrast with the white formation above it. It is of course spotted, and lighted up by the white crystals of gypsum.

I do not believe it necessarily follows that because the [886] gypsite or gypsiferous earth is a dark brown that it is necessarily less rich than the white material.

Q. State whether or not that dark brown material or gypsiferous earth could be marketed as profitably as the solid white gypsite.

A. The actual operation of taking from the loose formation holding the gypsum crystals, in which they are gathered together and concentrated into high percentage product—the actual cost in dollars and cents,



(Testimony of H. H. Ochsner.)

might be as cheap as the mining and operation of the upper or overlying deposit. Gypsiferous earth, bearing about 50 per cent gypsum, might be worked with as great profit as solid gypsum running about 80 per cent.

Q. Explain how that is possible.

A. In this case it is a physical separation of the pure crystals from the loose matrix, the separation being purely mechanical, leaving the pure crystals behind, the actual mining being a simple matter of pick and shovel without expensive equipment and without the use of machinery involving time and expense and initial outlay.

The other photographs attached to that affidavit, according to my best recollection, were all taken upon this Northeast quarter referred to, and show the gypsum that appears upon that quarter.

The COURT.—Will you indicate on that map the substantially correct points where you took the photograph? (Referring to Plaintiff's Exhibit Number 1.)

A. The long trenches, I believe, are located there. I said on the southeast. I was wrong. The last photograph, the one showing the relation between the lower gypsum-bearing earth, I believe would be identified as the location about there in the Southeast [887] quarter.

The WITNESS.—(Continuing.) In my opinion, the gypsum or deposit on that Northeast quarter could at the present time be worked at a profit. I believe that the gypsum outside of that Northeast

(Testimony of H. H. Ochsner.)

quarter and embraced in that deposit that I have described could also be worked at a profit. I base my statement that it could upon the estimate of the cost of excavation and transportation to market.

A cleaning plant to bring the marketable product would be necessary to the production and manufacture of gypsum in the way of machinery. Factors of improvement in transportation, the new roads and conditions of development in the oil fields in which one could get a back haul to the railroad on the teams going west—the transportation east and the back haul—are other factors I would take into consideration in forming my conclusions that gypsum could be marketed at a profit at this time. The proximity to cheap fuel supply I would mention as one of the factors.

Cross-examination.

(By Mr. HALL.)

Q. You are commonly known as Doctor Ochsner?

A. I believe so.

Q. How do you acquire that title?

A. I am not a doctor of philosophy. It is more or less a nickname.

Q. You have no degree—

A. As doctor of philosophy, no.

Q. Nor doctor of medicine? A. No.

Q. Or any other degree which would entitle you to be called “Doctor”? A. That is right.

WITNESS.—I spent two days in the examination of the Northwest quarter of Section 30. I went out there at the instance of the management of the prop-

(Testimony of H. H. Ochsner.)

erty at that place. Roy Bishop, the manager of the company, made the arrangement. I was employed as a professional expert [888] to go out there and examine the property. Before that time I had had experience with two other deposits of gypsum in the State of California. One was in Monterey County; I don't know the number of miles, but it was northeast of King City. The deposit is not operated today; I believe it has been abandoned. I should say it has been abandoned for two or three years. In the fall of 1908 I examined it and advised that it could not be economically operated. I don't know how long it was operated. I believe there was a small cleaning plant erected at King City. That cleaning plant was about fifteen miles away from the actual deposit of gypsum; I have forgotten the distance. The gypsum was transported by wagon.

As I recall it, it was a matter of perhaps forty or fifty acres of ground with a deposit of gypsum occurring perhaps a foot and a half or two feet thick. I do not know whether or not that deposit was entirely worked out; I have not been back.

The gypsite deposit that I operated on in Ventura County was south of Fillmore, on top of the Oak Ridge, about seven miles from the railroad. That plant is not in operation now. I never advised its operation as a gypsum proposition. I counseled against it, due to the smallness of the deposit. The deposit was several feet thick and very pure, but confined to a very little area, perhaps not over seven or eight acres.

(Testimony of H. H. Ochsner.)

I don't recall the specific accurate analysis, but I assume the gypsum ran about in the neighborhood of 95 per cent pure.

The gypsum deposit in Monterey County ran somewhere about 85 per cent pure, as I recall; 85 or 90. In appearance and occurrence it looked pretty much like the deposits that we have in the San Joaquin Valley. I don't know how long it was operated, but I know that they were abandoned.

When I made my estimate of the amount of gypsum on the Northeast quarter of Section 30, being the lands involved in the [889] suit, I did not take into consideration the gypsiferous earth which underlies this gypsite deposit.

Q. I believe you stated that the gypsiferous earth could be operated as profitably as the gypsite above?

A. I said there was a chance that actual operations in dollars and cents might prove as cheap. In other words, I believe there was a reserve stock of material there which might be used later on. It did not form part of my estimate as an available supply.

The WITNESS.—(Continuing.) I didn't include that in my estimate of the available supply at the time I was out there because I desired to be conservative and took that material of higher percentage and definite distribution. The distribution of the lower material was not so certain. It had not been opened up and it could only be conjectured as to where that might be. I did not penetrate to the bottom of that gypsiferous earth. I examined the trenches. The deepest place I went to find it was that cellar, pho-

(Testimony of H. H. Ochsner.)

tograph Number 9. It was a cellar in the southeast corner of the northeast quarter. I believe that was twelve or fourteen feet deep. I don't think that exposed the bottom of the gypsiferous earth.

I have not been engaged in the actual work in the use of gypsum in the arts and trades. I never have been personally engaged in it. I have never been engaged in the production of gypsum for agricultural purposes, for fertilizer, and so forth. I know nothing about that from actual experience.

I believe we took samples from fresh cuts that we made outside of the trenches which bisect the dividing line between the northwest quarter and the southwest quarter of the northwest quarter of the northeast quarter of Section 30, close to the trenches. I don't recall whether they were east or west of those. I think they were taken three or four in the neighborhood of the [890] trenches. This picture number 2, and picture number 3, were taken in one of those trenches, I do not recall which one. This picture number 3 is a picture of Dr. Fischel. He is holding his hammer at the upper surface of the gypsite. I believe at that time we had taken samples of that trench. I do not recall that it is a photo of the exact position where the Doctor had taken some of his samples. He had taken some samples before that picture was taken. We were at work gathering samples when these protographs were taken.

Q. You stated that in this gypsite deposit which is typical of all gypsite deposits, that the richer material is at the upper surface of the gypsite deposit.



(Testimony of H. H. Ochsner.)

A. My idea was to say that the gypsite does occur at the upper surface of the zone from which it originated.

Q. Take, for instance, if we have a layer of gypsite on the surface like that, and above it an overburden, and below it this gypsiferous earth,—say that that gypsite deposit is twelve inches in thickness: Isn't it a fact that the upper four inches of that gypsite deposit will be of greater purity than the next four inches? A. I should say not.

For all practical purposes the entire thickness of the gypsite would be of the same degree of purity; the entire mass is mixed. Referring to the upper half of an ideal section of a gypsite deposit twelve inches in thickness, a chemical analysis of the upper six inches might show a richer result than the lower six inches. I don't know as to this; I am not certain. I do not think the picture shows that Dr. Fischel has made his sample from the upper layer of gypsite.

Q. Just look below and in front of Dr. Fischel's hammer and see if it does not indicate that there has been a sample taken [891] from the upper layer of that gypsite and not from the lower portion of the layer. A. I believe not.

Those lines there represent the marks of the hammer in that picture. They do not extend all the way down through that layer of gypsite. Those marks were made there to define the upper edge of the gypsite from the soil. It made a fresh cut. We did

(Testimony of H. H. Ochsner.)

not take samples purely from the upper layer or course of that gypsite.

Examining photograph number 23, I would not recall the location as any point on the northeast quarter of Section 30 which we examined.

Q. Isn't it a fact that in the picture which is marked photograph number 23, that it represents a spot on the southeast quarter of the southwest quarter of the northeast quarter of Section 30, township 26 south, range 21 east, from which you and Dr. Fischel took a sample of gypsum, and it does not show that the sample which you took was taken from the upper crust of the layer of gypsite exposed in that opening?

A. I cannot identify the location of the sample.

Dr. Fischel and I probably took a sample in the southeast of the southwest of the northeast of Section 30.

Q. To be fair to you, I will let you see the plat.

A. We probably did. We made an effort to cover the ground.

Q. Isn't it a fact that Dr. Fischel's sample which is marked and designated as sample 26,118, was the sample which was taken in the southeast quarter of the southwest quarter of the northeast quarter of Section 30?

A. I don't find anything that will identify this analysis and this sample as against the location that you describe.

Q. Isn't it a fact that sample 26,118 which you describe [892] as having been taken from the

(Testimony of H. H. Ochsner.)

northwest corner of the northwest quarter as described in this affidavit was taken merely from the upper crust or upper portion of the layer of the gypsite that was there exposed?

A. Samples were never chosen in that way.

Sample No. 26,121 was not taken from the upper crust of the section that I have marked there. Of the area, up and down, cut into in taking samples number 26,118, they were all chosen from top to bottom of the gypsite zone or gypsite bed. The idea was to take a fair sample which must be the sum total of the vertical range. I think the thickness of the place where sample 26,118 was taken was perhaps two and a half or three feet—that is the northwest corner of the northwest.

I cannot say definitely the thickness of the next sample, 26,119, but I assume it was probably eighteen inches.

I do not recall definitely the vertical thickness of the gypsum at the point where sample 26,121 was taken. I assume it was perhaps a foot and a half or two feet.

I believe that the gypsum from the northeast of 30 could be treated and handled and marketed at a profit. Gypsum that runs from 90 to 100 per cent pure ought to be worth seven and a half or eight to twelve or fourteen dollars, according to the conditions under which it is marketed and the use for which it is intended. That has been the general market price of gypsum in the State of California since last fall. I don't know that 65 per cent gyp-

(Testimony of H. H. Ochsner.)

sum is being sold in the open market. Usually the material 80, 85, 90 and 95, are the grades of gypsum that are being sold in the market.

The last quotations I had were \$7.50 to \$14 per ton. \$7.50 for the material used for land plaster in the San Joaquin Valley. [893] I am speaking of the market in this immediate neighborhood. I don't know how long these prices, \$7.50 to \$14 per ton, have been in existence. I don't know that it was for the last ten years. Those quotations were given me by some of the operators in Southern California. There were two groups of operators in Los Angeles. I have forgotten the names. He represented the person for whom I made the examination of the work in Ventura County. I made the examination for Mr. De Salyer. The figures given me at that time showed that there was a range from about \$7 to \$12 or \$14. They got \$7 for a crude gypsum uncleaned for land plaster, from 85 to 92 per cent purity.

In the market they used 85 to 92 per cent gypsum for land plaster. For building purposes and for making cement and wall plaster they required a very pure white calcined material which goes from 95 to 98, or perhaps as low as 92. That is the grade of gypsum that is required in the trade for making the wall plaster and Portland cement. They do not use gypsum that runs 40 and 41 per cent in the trade for those purposes, nor do they use gypsum that runs 65 to 70 per cent. So that gypsum that runs from 65 to 75 per cent in purity has no place in the

(Testimony of H. H. Ochsner.)

market as a trade product.

Gypsum that would run that low would not find any ready market in the State of California unless it is cleaned. Then it is in a marketable condition. I have talked to operators with special reference to this deposit, estimating what it would cost to operate, handle, clean, sack and market it, with respect to what it would cost per ton to handle gypsum that way. Those operators were in the bank at Fillmore. There were two men there who financed the original project of the plant—the gypsum mills—at Fillmore. I have forgotten their names. They were in the [894] one and only bank at Fillmore.

Q. And you have not had any practical experience yourself to ascertain what it would cost?

A. I never had the actual management.

The WITNESS.—(Continuing.) From experience in actual operations I have no personal knowledge of what labor would cost, or hauling, or anything about it out in the Lost Hills. These two bank men were not actual operators of the property but mere financiers behind it. While they did not have actual experience in operations to ascertain the cost, they had actual experience in the dollars and cents that it cost. They expended the money but I do not believe they had the actual experience of removing it.

At the time I was at the northeast quarter of Section 30 I made inquiry as to the freight rates from that point to the nearest railroad point; they were about \$3 a ton. The nearest railroad point was



(Testimony of H. H. Ochsner.)

Wasco, which I believe was about thirty miles away.

Q. You spoke something about the advantage of a back haul. You mean by that, do you not, that a company such as this company, in hauling out their material, would have the empty wagons come back?

A. They are willing to make a cheaper rate.

The WITNESS.—(Continuing.) It was apparent from my examination that this hauling has been going on for some time; ever since that development, or about three years. About two years before I made the examination. I have reference to the extensive development which took place in 1911 or 1912. I mean the oil development. I would judge from the conditions there that for the last three or four years before my examination there had been a back haul available. It is a fact that when I was out there I saw automobile trucks going out loaded and coming back empty. I saw no attempt on the part of these defendants at any time while I was out there, or any indication, that they had attempted to avail themselves of this cheap back [895] haul to take away any of the gypsum.

Beyond the mere sacking of some of this gypsum that had been there, I saw no place where there had been any attempt to remove off this quarter section of land. I don't know the exact number of sacks, but my impression is, perhaps three hundred. They showed evidences of being exposed to the weather. They had been there for months; probably passed through one rainy spell.

The Lost Hills in general contour, in the broader

(Testimony of H. H. Ochsner.)

aspect, is one large gentle elevation. But in this particular quarter section, in the smaller aspect, the ground is rather rolling,—little swells and swales and hills and valleys. We made some examinations in those lower cuts, as well as on these little hill-tops. We did not find the same richness and purity of gypsum and gypsite and gypsiferous earth in the lower swales that we did in the hilltops. The gypsite was confined largely to the highest points of the topography, and in the valleys between these high points we apparently found gypsiferous earth. We did not make any samples of that; merely visual inspection, seeing that it was not gypsum. It was not the commercial deposit that we were looking for.

The area of these little tops or little domes, we figured that the nearest that could be told—that the domes or highest points constituted perhaps 95 per cent of the entire acreage. On the west half of the northwest quarter there of this quarter section where the three long trenches are, those were cut on the side of the hill on one of the highest elevations. I don't know how much of the area the dome covered in acreage where the three long trenches were. We made an attempt to estimate the acreage of the depressions, those eroded areas where the deposit was lacking, by eliminating the area which contained none. It was easier to get rid of. [896]

In arriving at our estimate of 400,000 tons, we did not arrive at that by measuring the actual deposit, but by the process of elimination of those points where there was no gypsum. I don't believe I can

(Testimony of H. H. Ochsner.)

give you any estimate of the acreage in that area surrounding those three trenches. There are between 80 to 100 pounds gypsite to the cubic foot.

Q. Now, then, how could you tell what amount of gypsum in tons was contained in that particular hill where these three trenches were, if you don't know how many acres there were in that particular area?

A. The process of elimination of the smaller area, and deducting them and taking the entire mass of distribution of the material over *the entire mass of distribution of the material over* the entire acreage, and then, to be conservative, cutting that down again. It is more or less an approximation.

I would estimate that it would cost about \$6 per ton to mine, handle, screen, clean, sack and transport that gypsum from the northeast quarter of Section 30 to the town of Wasco.

Q. If at that time gypsum running from 90 to 100 per cent pure could be bought in the market on the tract at Amboy for \$2.50 to \$3.50 per ton, you would not consider this gypsite profitable, would you, or that it could compete in the open market with those other deposits in the State of California such as that at Amboy?

A. When you weigh all the conditions of supply and purpose of the material, transportation and so on, they all enter into the estimate as to the operation of the deposit. Those cannot be told until actual operations and actual comparison of the data of operation. I am not prepared to answer that off-hand.

(Testimony of H. H. Ochsner.)

The WITNESS.—(Continuing.) It would cost about \$6 per ton to get it to Wasco. [897]

Q. And if a person could go to Amboy and buy a higher grade of gypsum at from \$2.50 to \$3.50 per ton, would you say then that this could compete in the market with the product at Amboy?—In the markets of the State of California.

A. Your question overlooks so many things which might change the answer one way or the other, that I am not able to answer.

Q. You are not able to answer that plain question?

A. Exactly.

The WITNESS.—(Continuing.) If an average sample of this northeast quarter only runs 65 per cent to 75 per cent, I believe it could compete as a practical, economical product in the markets of the State of California with gypsum that runs from 90 to 100 per cent. It would not be as cheap and economical for consumers to buy this gypsum that runs 65 to 70 per cent as to buy the pure product which runs 90 to 100, but I am assuming that when this material is cleaned it would be worked up to standard.

As near as we could estimate it, there were 400,000 tons of this gypsum product out there on this ground. That is the gypsum product just as we found it there.

Q. And if it ran only 85 per cent, taking the very highest of it,—would it not cost more to handle and market it than it would in a deposit that runs 90 to 100 per cent pure?

A. It depends on the character of the deposit. One deposit may be solid and require more time and effort



(Testimony of H. H. Ochsner.)

and expense in the preparation of the material, and the other may be soft and yielding.

It would depend upon the hardness of the material whether or not it would cost more to handle a thin deposit like this shown in your picture, than to handle a thick deposit five or six or seven feet thick. We would have to separate the gangue matter and [898] the over-burden and all that stuff. In the gypsum that we found out there, there was some clay as well as a good deal of sand. We have to account for all those things in the handling of the gypsite deposits. The more sand and clay you have to separate the more it costs. All those things go into the question of the value of the deposit of gypsite.

We found no intrusions of earth into this gypsum.

Q. Did you look in this trench—I refer now to photographs 7 and 8, offered in connection with Mr. Jensen's depositions, which were taken on the north-east quarter of the northwest quarter of Section 30—you did not see such an opening as that which had those large intrusions or inclusions of earthy substance as are shown there?

A. Those are depressions and irregularities in the surface of the gypsite, but I do not see any total intrusions by which the dirt was held in a mass surrounded by gypsum.

There were some irregularities in the surface below, but not great. The contact between the edge of of the deposit or lower surface or bottom of it—there were small irregularities in the contact between the gypsite and the gypsiferous earth underlying it.



(Testimony of H. H. Ochsner.)

I made an examination of the trenches, those three long trenches in the northwest corner of this quarter-section, that have been used here in this discussion as the subject of the photographs which I took.

In making an examination of the deposit through the top of the west face of the east trench, the upper contact of the deposit with the soil was not smooth; it was irregular. I do not recall an example of the overlying material having cut through the gypsite zone or gypsite bed. I looked at it very carefully. There were [899] places where the gypsiferous earth intruded from below. I did not see any evidence of the continuous formation of the gypsite being cut off, but it thickened and thinned.

Q. Now, if this be illustrative of this gypsite deposit, wouldn't it be a great detriment in the handling of it to get rid of the overburden and the soil beneath? Would it not be more expensive to handle a deposit where the upper surface and the lower surface occurred with such irregularity as it illustrated there? A. Yes, sir.

Q. And that is one of the things you have to take into consideration in determining whether or not the deposit is profitable? A. Yes, sir.

The WITNESS. — (Continuing.) As near as could be told, we took samples from each five-acre tract. The samples averaged perhaps three to five or ten pounds apiece. We attempted to choose samples so that they would show the aggregate of the material taken from top to bottom of the gypsite. But we would just go on and say, "This place is

(Testimony of H. H. Ochsner.)

typical of this five-acre tract," and we would take a five or ten pound sample right down through it there. That was the extent of our sample on each five-acre tract. We tried to take one of those samples from each five-acre tract on the land in question, and I believe it was a fair sampling of the entire area.

Q. Don't you think it would have been much more fair to have taken from say ten or fifteen or twenty different places over each entire area, and then to have taken a sample of that?

A. It would agree with the total comparison in the end; I think there would be practically no discrepancy. That is a mere matter of opinion.

But in careful sampling. I believe it would be more proper to go to one spot and take a sample, to another spot and take a sample, and to another spot, and so on, over a five or ten-acre [900] tract, visiting some ten or fifteen or twenty different places, than to take the samples in the manner in which we did in one place. That method would be more indicative of the characteristics of the gypsite than to go as we did and take a five or ten pound sample at one point.

The different samples which I took are attached to my affidavits. These analyses given at the end as Exhibits "A," "C," "B," and "D," and "E," constituted about half of the material. As I remember, the material was all gathered together and, in the usual method in sampling, the material was assembled and crushed and piled and quartered, so that you might choose a few samples for analysis or you

(Testimony of H. H. Ochsner.)

might use many. To make clear, after the samples are taken, they are mixed. That is the usual process.

If you will permit me in saying something about my own experience in handling industrial materials which I have been shipping for the last year and a half and of observing the sampling of the firms concerned—manganese, for instance—the materials are chosen by grab samples. Holes are dug over the carload. They are then gathered together and mixed and samples for analysis are drawn. In talking about sampling ores in cars, the same illustration of the mass of material can be applied here. We sample a car of ore the same as you would gypsum in the ground. It exhibits the same relation. We made an effort to take a sample from each five-acre tract, from one point at least. Then we took a number of those samples from each five-acre tract and combined them together and made a sample from that.

I can't tell you what particular five-acre tract the material came from that was taken in marking those samples, to wit: Number 26,118. The effort was made to avoid selecting material from any particular tract which produced any one of these samples. The effort was made to avoid analyses at the locations. The analysis [901] as to the gypsite over the area was the object aimed at in the sampling. You avoid analysis at the specific locations. The idea is to get the tonnage of the material over the entire acreage.

If you took eighteen samples, and wanted the aver-

(Testimony of H. H. Ochsner.)

age purity of the gypsum covering the entire northeast quarter of Section 30, you would then add to the eighteen samples the total percentage together and divide that by 18 to get the average over the entire surface on the northeast quarter of Section 30. So that in the sampling you could not tell what was the result of the analysis of a sample taken from any one particular five-acre tract.

I don't remember how many of these samples from these particular five-acre tracts we combined together in each instance. We took the total number of the sections and divided them as near as could be into equal divisions and the number of samples that we agreed or cared to have. That is merely an arbitrary arrangement. When I say in exhibit "A" here, that sample 26118 was taken from the northwest corner of the northwest corner, that don't mean that the particular soil or particular gypsum that was taken ran 82.05 per cent pure, as confined to any particular five-acre tract. All I know is, that we took samples here, there and yonder, and combined them together and got that result. We wanted to avoid determining whether that 82.05 per cent analysis, or gypsum from which the analysis was made, is typical of anything in any single five-acre tract in the northwest quarter. I don't know whether the sample which went 58.28 was typical of any particular tract; only of the vertical range. I mean samples were taken from the substratum of gypsiferous earth to illustrate its relation to the higher grade near the surface. I don't know the number of stations from which we took samples over this entire surface.